

Third Edition

Distribution System Modeling and Analysis



William H. Kersting

 CRC Press

Distribution System Modeling And Analysis Third Edition

Michael H. Cole



Distribution System Modeling And Analysis Third Edition:

Distribution System Modeling and Analysis William H. Kersting, 2016-02-03 Updated to reflect the latest changes and advances in the field Distribution System Modeling and Analysis Third Edition again illustrates methods that will ensure the most accurate possible results in computational modeling for electric power distribution systems With the same simplified approach of previous editions this book clearly explains the principles and mathematics behind system models also discussing the smart grid concept and its special benefits However this volume adds a crucial element not found in previous editions The first two books developed models for all components but focused less on how to actually implement those models on a computer for planning and for real time analysis This book includes numerous models of components and several practical examples to demonstrate how engineers can apply and customize computer programs to help them plan and operate systems It also covers approximation methods to help users interpret computer program feedback so they recognize when a result is not what it should be Another improvement is the book s earlier introduction in chapter 4 of the modified ladder iterative technique The author explains the need for this method which is used in most distribution analysis programs detailing how it is applied and why it is among the most powerful options Concluding with a detailed summary of presented topics that readers have come to expect this edition provides useful problems references and assignments that help users apply Mathcad and WIndmil programs to put their new learning into practice An invaluable tool for engineering students and professionals worldwide this book explores cutting edge advances in modeling simulation and analysis of distribution systems that can ensure the continued dispersal of safe reliable energy Watch William H Kersting talk about his book at <http://www.youtube.com/watch?v=qmlDiH1ntuE>

Solutions Manual for Distribution System Modeling and Analysis Se Kersting William H Staff, William H Kersting, 2006-11 *Water Distribution Operator Training Handbook Third Ed* AWWA Staff, 2011-01-12 AWWA s most popular handbook for distribution operators this handbook provides a complete introduction to water distribution system operation and equipment

Computational Methods for Electric Power Systems Mariesa L. Crow, 2015-11-11 Computational Methods for Electric Power Systems introduces computational methods that form the basis of many analytical studies in power systems The book provides the background for a number of widely used algorithms that underlie several commercial software packages linking concepts to power system applications By understanding the theory behi

Applied Reliability, Third Edition Paul A. Tobias, David Trindade, 2011-08-26 Since the publication of the second edition of Applied Reliability in 1995 the ready availability of inexpensive powerful statistical software has changed the way statisticians and engineers look at and analyze all kinds of data Problems in reliability that were once difficult and time consuming even for experts can now be solved with a few well chosen clicks of a mouse However software documentation has had difficulty keeping up with the enhanced functionality added to new releases especially in specialized areas such as reliability analysis Using analysis capabilities in spreadsheet software and two well maintained supported and frequently

updated popular software packages Minitab and SAS JMP the third edition of Applied Reliability is an easy to use guide to basic descriptive statistics reliability concepts and the properties of lifetime distributions such as the exponential Weibull and lognormal The material covers reliability data plotting acceleration models life test data analysis systems models and much more The third edition includes a new chapter on Bayesian reliability analysis and expanded updated coverage of repairable system modeling Taking a practical and example oriented approach to reliability analysis this book provides detailed illustrations of software implementation throughout and more than 150 worked out examples done with JMP Minitab and several spreadsheet programs In addition there are nearly 300 figures hundreds of exercises and additional problems at the end of each chapter and new material throughout Software and other files are available for download online

Computer Modeling of Water Distribution Systems Laredo Robinson, Jerry A. Edwards, Lindle D. Willnow, 2012 Resource added for the Environmental Engineering Waste and Water Technology program 105062

Computer Modeling of Water Distribution Systems American Water Works Association, 2005 Updated from the 1989 version this manual presents the basics of computerized programs and processes for control and maintenance of a water distribution system Discussed are operational functions that should be included how systems should be designed and organized and what operators should be aware of to integrate new data into current systems

Standard Handbook for Electrical Engineers, Seventeenth Edition Surya Santoso, H. Wayne Beaty, 2017-11-24 Up to date coverage of every facet of electric power in a single volume This fully revised industry standard resource offers practical details on every aspect of electric power engineering The book contains in depth discussions from more than 100 internationally recognized experts Generation transmission distribution operation system protection and switchgear are thoroughly explained Standard Handbook for Electrical Engineers Seventeenth Edition features brand new sections on measurement and instrumentation interconnected power grids smart grids and microgrids wind power solar and photovoltaic power generation electric machines and transformers power system analysis operations stability and protection and the electricity market Coverage includes Units symbols constants definitions and conversion factors Measurement and instrumentation Properties of materials Interconnected power grids AC and DC power transmission Power distribution Smart grids and microgrids Wind power generation Solar power generation and energy storage Substations and switch gear Power transformers generators motors and drives Power electronics Power system analysis operations stability and protection Electricity markets Power quality and reliability Lightning and overvoltage protection Computer applications in the electric power industry Standards in electrotechnology telecommunications and IT

Electric Power Distribution Reliability Richard E. Brown, 2017-12-19 Due to its high impact on the cost of electricity and its direct correlation with customer satisfaction distribution reliability continues to be one of the most important topics in the electric power industry Continuing in the unique tradition of the bestselling first edition Electric Power Distribution Reliability Second Edition consolidates all pertinent topics on electric power distribution

into one comprehensive volume balancing theory practical knowledge and real world applications Updated and expanded with new information on benchmarking system hardening underground conversion and aging infrastructure this timely reference enables you to Manage aging infrastructure Harden electric power distribution systems Avoid common benchmarking pitfalls Apply effective risk management The electric power industry will continue to make distribution system reliability and customer level reliability a top priority Presenting a wealth of useful knowledge *Electric Power Distribution Reliability* Second Edition remains the only book that is completely dedicated to this important topic *Electric Power Generation, Transmission, and Distribution* Leonard L. Grigsby, 2018-09-03 Featuring contributions from worldwide leaders in the field the carefully crafted *Electric Power Generation Transmission and Distribution* Third Edition part of the five volume set *The Electric Power Engineering Handbook* provides convenient access to detailed information on a diverse array of power engineering topics Updates to nearly every chapter keep this book at the forefront of developments in modern power systems reflecting international standards practices and technologies Topics covered include Electric power generation nonconventional methods Electric power generation conventional methods Transmission system Distribution systems Electric power utilization Power quality L L Grigsby a respected and accomplished authority in power engineering and section editors Saifur Rahman Rama Ramakumar George Karady Bill Kersting Andrew Hanson and Mark Halpin present substantially new and revised material giving readers up to date information on core areas These include advanced energy technologies distributed utilities load characterization and modeling and power quality issues such as power system harmonics voltage sags and power quality monitoring With six new and 16 fully revised chapters the book supplies a high level of detail and more importantly a tutorial style of writing and use of photographs and graphics to help the reader understand the material New chapters cover Water Transmission Line Reliability Methods High Voltage Direct Current Transmission System Advanced Technology High Temperature Conduction Distribution Short Circuit Protection Linear Electric Motors A volume in the *Electric Power Engineering Handbook* Third Edition Other volumes in the set K12648 *Power Systems* Third Edition ISBN 9781439856338 K13917 *Power System Stability and Control* Third Edition ISBN 9781439883204 K12650 *Electric Power Substations Engineering* Third Edition ISBN 9781439856383 K12643 *Electric Power Transformer Engineering* Third Edition ISBN 9781439856291 **Power Systems** Leonard L. Grigsby, 2017-12-19 *Power Systems* Third Edition part of the five volume set *The Electric Power Engineering Handbook* covers all aspects of power system protection dynamics stability operation and control Under the editorial guidance of L L Grigsby a respected and accomplished authority in power engineering and section editors Andrew Hanson Pritindra Chowdhuri Gerry Shebl and Mark Nelms this carefully crafted reference includes substantial new and revised contributions from worldwide leaders in the field This content provides convenient access to overviews and detailed information on a diverse array of topics Concepts covered include Power system analysis and simulation Power system transients Power system planning reliability Power electronics

Updates to nearly every chapter keep this book at the forefront of developments in modern power systems reflecting international standards practices and technologies New sections present developments in small signal stability and power system oscillations as well as power system stability controls and dynamic modeling of power systems With five new and 10 fully revised chapters the book supplies a high level of detail and more importantly a tutorial style of writing and use of photographs and graphics to help the reader understand the material New chapters cover Symmetrical Components for Power System Analysis Transient Recovery Voltage Engineering Principles of Electricity Pricing Business Essentials Power Electronics for Renewable Energy A volume in the Electric Power Engineering Handbook Third Edition Other volumes in the set K12642 Ele *Service Considerations and the Design of Strategic Distribution Systems* Michael H. Cole,1995

Advances in Distributed Energy Resources Aggregation for the Low Carbon Future Qinran Hu,Qiuwei Wu,Qingxin Shi,Hantao Cui,2023-02-15 **Water Distribution Operator Training Handbook** ,2005 AWWA s most popular handbook for distribution operators this handbook provides a complete introduction to water distribution system operation and equipment **Advanced Water Distribution Modeling and Management** Thomas M. Walski,2003 Accompanying CD ROM includes a 25 pipe academic version of WaterCAD with stand alone interface the WaterCAD files for individual problems the WaterCAD user manual and an examination booklet for continuing education credits Adobe Acrobat Reader software for viewing the manual and booklet Proceedings ,1984 *Applied Simulation & Modelling* International Association of Science and Technology for Development,1989 Otto E. Miller, Plaintiff-Respondent, Against Fred W. Smythe, Defendant-Appellant , **Handbook of Optics Third Edition, 5 Volume Set** Optical Society of America,2010-05-18 The most comprehensive and up to date optics resource available Prepared under the auspices of the Optical Society of America the five carefully architected and cross referenced volumes of the Handbook of Optics Third Edition contain everything a student scientist or engineer requires to actively work in the field From the design of complex optical systems to world class research and development methods this definitive publication provides unparalleled access to the fundamentals of the discipline and its greatest minds Individual chapters are written by the world s most renowned experts who explain illustrate and solve the entire field of optics Each volume contains a complete chapter listing for the entire Handbook extensive chapter glossaries and a wealth of references This pioneering work offers unprecedented coverage of optics data techniques and applications Volume I covers geometrical and physical optics polarized light components and instruments Volume II covers design fabrications testing sources detectors radiometry and photometry Volume III all in full color covers vision and vision optics Volume IV covers optical properties of materials nonlinear optics and quantum optics Volume V covers atmospheric optics modulators fiber optics and x ray and neutron optics Visit www.HandbookofOpticsOnline.com to search all five volumes and download a comprehensive index Interfaces ,1994 Seeks to improve communication between managers and professionals in OR MS

The Enigmatic Realm of **Distribution System Modeling And Analysis Third Edition**: Unleashing the Language is Inner Magic

In a fast-paced digital era where connections and knowledge intertwine, the enigmatic realm of language reveals its inherent magic. Its capacity to stir emotions, ignite contemplation, and catalyze profound transformations is nothing lacking extraordinary. Within the captivating pages of **Distribution System Modeling And Analysis Third Edition** a literary masterpiece penned by a renowned author, readers attempt a transformative journey, unlocking the secrets and untapped potential embedded within each word. In this evaluation, we shall explore the book's core themes, assess its distinct writing style, and delve into its lasting impact on the hearts and minds of those who partake in its reading experience.

<https://matrix.jamesarcher.co/public/browse/Documents/handwriting%20practice%20book%20practice%20workbook.pdf>

Table of Contents Distribution System Modeling And Analysis Third Edition

1. Understanding the eBook Distribution System Modeling And Analysis Third Edition
 - The Rise of Digital Reading Distribution System Modeling And Analysis Third Edition
 - Advantages of eBooks Over Traditional Books
2. Identifying Distribution System Modeling And Analysis Third Edition
 - Exploring Different Genres
 - Considering Fiction vs. Non-Fiction
 - Determining Your Reading Goals
3. Choosing the Right eBook Platform
 - Popular eBook Platforms
 - Features to Look for in a Distribution System Modeling And Analysis Third Edition
 - User-Friendly Interface
4. Exploring eBook Recommendations from Distribution System Modeling And Analysis Third Edition
 - Personalized Recommendations
 - Distribution System Modeling And Analysis Third Edition User Reviews and Ratings

- Distribution System Modeling And Analysis Third Edition and Bestseller Lists
- 5. Accessing Distribution System Modeling And Analysis Third Edition Free and Paid eBooks
 - Distribution System Modeling And Analysis Third Edition Public Domain eBooks
 - Distribution System Modeling And Analysis Third Edition eBook Subscription Services
 - Distribution System Modeling And Analysis Third Edition Budget-Friendly Options
- 6. Navigating Distribution System Modeling And Analysis Third Edition eBook Formats
 - ePub, PDF, MOBI, and More
 - Distribution System Modeling And Analysis Third Edition Compatibility with Devices
 - Distribution System Modeling And Analysis Third Edition Enhanced eBook Features
- 7. Enhancing Your Reading Experience
 - Adjustable Fonts and Text Sizes of Distribution System Modeling And Analysis Third Edition
 - Highlighting and Note-Taking Distribution System Modeling And Analysis Third Edition
 - Interactive Elements Distribution System Modeling And Analysis Third Edition
- 8. Staying Engaged with Distribution System Modeling And Analysis Third Edition
 - Joining Online Reading Communities
 - Participating in Virtual Book Clubs
 - Following Authors and Publishers Distribution System Modeling And Analysis Third Edition
- 9. Balancing eBooks and Physical Books Distribution System Modeling And Analysis Third Edition
 - Benefits of a Digital Library
 - Creating a Diverse Reading Collection Distribution System Modeling And Analysis Third Edition
- 10. Overcoming Reading Challenges
 - Dealing with Digital Eye Strain
 - Minimizing Distractions
 - Managing Screen Time
- 11. Cultivating a Reading Routine Distribution System Modeling And Analysis Third Edition
 - Setting Reading Goals Distribution System Modeling And Analysis Third Edition
 - Carving Out Dedicated Reading Time
- 12. Sourcing Reliable Information of Distribution System Modeling And Analysis Third Edition
 - Fact-Checking eBook Content of Distribution System Modeling And Analysis Third Edition
 - Distinguishing Credible Sources

13. Promoting Lifelong Learning
 - Utilizing eBooks for Skill Development
 - Exploring Educational eBooks
14. Embracing eBook Trends
 - Integration of Multimedia Elements
 - Interactive and Gamified eBooks

Distribution System Modeling And Analysis Third Edition Introduction

In the digital age, access to information has become easier than ever before. The ability to download Distribution System Modeling And Analysis Third Edition has revolutionized the way we consume written content. Whether you are a student looking for course material, an avid reader searching for your next favorite book, or a professional seeking research papers, the option to download Distribution System Modeling And Analysis Third Edition has opened up a world of possibilities. Downloading Distribution System Modeling And Analysis Third Edition provides numerous advantages over physical copies of books and documents. Firstly, it is incredibly convenient. Gone are the days of carrying around heavy textbooks or bulky folders filled with papers. With the click of a button, you can gain immediate access to valuable resources on any device. This convenience allows for efficient studying, researching, and reading on the go. Moreover, the cost-effective nature of downloading Distribution System Modeling And Analysis Third Edition has democratized knowledge. Traditional books and academic journals can be expensive, making it difficult for individuals with limited financial resources to access information. By offering free PDF downloads, publishers and authors are enabling a wider audience to benefit from their work. This inclusivity promotes equal opportunities for learning and personal growth. There are numerous websites and platforms where individuals can download Distribution System Modeling And Analysis Third Edition. These websites range from academic databases offering research papers and journals to online libraries with an expansive collection of books from various genres. Many authors and publishers also upload their work to specific websites, granting readers access to their content without any charge. These platforms not only provide access to existing literature but also serve as an excellent platform for undiscovered authors to share their work with the world. However, it is essential to be cautious while downloading Distribution System Modeling And Analysis Third Edition. Some websites may offer pirated or illegally obtained copies of copyrighted material. Engaging in such activities not only violates copyright laws but also undermines the efforts of authors, publishers, and researchers. To ensure ethical downloading, it is advisable to utilize reputable websites that prioritize the legal distribution of content. When downloading Distribution System Modeling And Analysis Third Edition, users should also consider the potential security risks associated with online platforms. Malicious actors may exploit

vulnerabilities in unprotected websites to distribute malware or steal personal information. To protect themselves, individuals should ensure their devices have reliable antivirus software installed and validate the legitimacy of the websites they are downloading from. In conclusion, the ability to download Distribution System Modeling And Analysis Third Edition has transformed the way we access information. With the convenience, cost-effectiveness, and accessibility it offers, free PDF downloads have become a popular choice for students, researchers, and book lovers worldwide. However, it is crucial to engage in ethical downloading practices and prioritize personal security when utilizing online platforms. By doing so, individuals can make the most of the vast array of free PDF resources available and embark on a journey of continuous learning and intellectual growth.

FAQs About Distribution System Modeling And Analysis Third Edition Books

1. Where can I buy Distribution System Modeling And Analysis Third Edition books? Bookstores: Physical bookstores like Barnes & Noble, Waterstones, and independent local stores. Online Retailers: Amazon, Book Depository, and various online bookstores offer a wide range of books in physical and digital formats.
2. What are the different book formats available? Hardcover: Sturdy and durable, usually more expensive. Paperback: Cheaper, lighter, and more portable than hardcovers. E-books: Digital books available for e-readers like Kindle or software like Apple Books, Kindle, and Google Play Books.
3. How do I choose a Distribution System Modeling And Analysis Third Edition book to read? Genres: Consider the genre you enjoy (fiction, non-fiction, mystery, sci-fi, etc.). Recommendations: Ask friends, join book clubs, or explore online reviews and recommendations. Author: If you like a particular author, you might enjoy more of their work.
4. How do I take care of Distribution System Modeling And Analysis Third Edition books? Storage: Keep them away from direct sunlight and in a dry environment. Handling: Avoid folding pages, use bookmarks, and handle them with clean hands. Cleaning: Gently dust the covers and pages occasionally.
5. Can I borrow books without buying them? Public Libraries: Local libraries offer a wide range of books for borrowing. Book Swaps: Community book exchanges or online platforms where people exchange books.
6. How can I track my reading progress or manage my book collection? Book Tracking Apps: Goodreads, LibraryThing, and Book Catalogue are popular apps for tracking your reading progress and managing book collections. Spreadsheets: You can create your own spreadsheet to track books read, ratings, and other details.
7. What are Distribution System Modeling And Analysis Third Edition audiobooks, and where can I find them?

- Audiobooks: Audio recordings of books, perfect for listening while commuting or multitasking. Platforms: Audible, LibriVox, and Google Play Books offer a wide selection of audiobooks.
8. How do I support authors or the book industry? Buy Books: Purchase books from authors or independent bookstores. Reviews: Leave reviews on platforms like Goodreads or Amazon. Promotion: Share your favorite books on social media or recommend them to friends.
 9. Are there book clubs or reading communities I can join? Local Clubs: Check for local book clubs in libraries or community centers. Online Communities: Platforms like Goodreads have virtual book clubs and discussion groups.
 10. Can I read Distribution System Modeling And Analysis Third Edition books for free? Public Domain Books: Many classic books are available for free as they're in the public domain. Free E-books: Some websites offer free e-books legally, like Project Gutenberg or Open Library.

Find Distribution System Modeling And Analysis Third Edition :

handwriting practice book practice workbook

handwriting practice book illustrated guide

Bookstagram favorite advanced strategies

~~award-winning personal finance literacy~~

self help mindset framework

english grammar manual stories

young adult life skills 2025 edition

cozy mystery bookshop primer

~~novel personal finance literacy~~

children bedtime story global trend

~~collection handwriting practice book~~

blueprint mindfulness meditation

reference leadership handbook

numbers counting book advanced strategies

coding manual framework

Distribution System Modeling And Analysis Third Edition :

Used 2002 Porsche 911 Turbo for Sale Near Me Used 2002 Porsche 911 Turbo Coupe ... \$1,323/mo est. fair value. \$4,160 above. Used 2002 Porsche 911 Carrera Turbo Coupe 2D See pricing for the Used 2002 Porsche 911 Carrera Turbo Coupe 2D. Get KBB Fair Purchase Price, MSRP, and dealer invoice price for the 2002 Porsche 911 ... Used 2002 Porsche 911 for Sale Near Me 2002 Porsche 911. Carrera Convertible ... ORIGINAL MSRP \$77,600 * BASALT BLACK METALLIC EXTERIOR * CRUISE CONTROL * POWER/HEATED COLOR- ... Images 2002 Porsche 911 Turbo Coupe AWD - Car Gurus Browse the best December 2023 deals on 2002 Porsche 911 Turbo Coupe AWD vehicles for sale. Save \$60966 this December on a 2002 Porsche 911 Turbo Coupe AWD ... 2002 Porsche 911 Turbo (996 II) 2002 Porsche 911 Turbo (996 II). Pre-Owned. \$70,995. Contact Center. Used 2002 Porsche 911 Turbo for Sale Near Me Shop 2002 Porsche 911 Turbo vehicles for sale at Cars.com. Research, compare, and save listings, or contact sellers directly from 6 2002 911 models ... Porsche 911 Turbo (2002) - pictures, information & specs A racecar-derived 3.6-liter, twin-turbo six-cylinder engine gives the 2002 911 Turbo staggering performance capability. The engine produces 415 horsepower (309 ... 2002 Porsche 911 Turbo 2dr Coupe Specs and Prices Horsepower, 415 hp ; Horsepower rpm, 6,000 ; Torque, 413 lb-ft. ; Torque rpm, 2,700 ; Drive type, all-wheel drive. The Parable of the Pipeline: How Anyone Can Build a ... The Parable of the Pipeline: How Anyone Can Build a ... The Parable Of Pipiline: Hedges, Burke: 9789388241779 In The Parable of the Pipeline, Burke Hedges explains how virtually anyone can leverage their time, relationships, and money to become a millionaire. The ... The Parable of the Pipeline: How Anyone Can Build a ... This book tells us about the people who are working as employee/self employed and about business people. Author relates all self employed, employees as a bucket ... The Parable of the Pipeline (English) - Burke Hedges In the parable of the pipeline, Burke Hedges explains how virtually anyone can leverage their time, relationships and money to become a millionaire. The parable ... The Parable of the Pipeline: How Anyone Can Build a ... By building pipelines of ongoing, residual income. With residual income, you do the work once and get paid over and over again. That's why one pipeline is worth ... THE PARABLE OF THE PIPELINE Mar 3, 2015 — Carry as big a bucket as you can but build a pipeline on the side, because as long as you carry buckets, you have to show-up to get paid, and no ... The Parable of the Pipeline Book: Summary and Review Apr 9, 2019 — The creation of pipelines is a must in our lives else the entire life we will die working. The construction of these pipelines may be tough but ... THE PARABLE OF THE PIPELINE. Reading ... - Medium The Parable Of The Pipeline, Burke Hedges explains how virtually anyone can leverage their time, relationships, and money to become the ... How Anyone Can Build a Pipeline of Ongoing Residual ... Synopsis: The Parable Of The Pipeline will teach you how to build pipelines of steady flowing income so that you can make the leap from earning a living today.. Arena Spectacles - Classics Argues that arena spectacles were a mechanism for linking center and periphery in the Roman Empire, spreading Roman culture, and establishing civic order. Arena Spectacles: Oxford Bibliographies Online Research ... This ebook is a selective guide designed

to help scholars and students of the ancient world find reliable sources of information by directing them to the ... Arena Spectacles: Oxford Bibliographies Online Research Guide This ebook is a selective guide designed to help scholars and students of the ancient world find reliable sources of information by directing them to the ... Arena Spectacles: Oxford Bibliographies Online Research ... This ebook is a selective guide designed to help scholars and students of the ancient world find reliable sources of information by directing them to the. Arena Spectacles Oxford Bibliographies Online Research Guide ... E. Norman Gardiner 2012-06-11 Concise, convincing book emphasizes relationship between Greek and Roman athletics and religion, art, and education. Arena Spectacles: Oxford Bibliographies Online Research ... Read reviews from the world's largest community for readers. The Roman games: A sourcebook. Malden, MA: Blackwell. Includes Ancient sources in translation... Arena Spectacles: Oxford Bibliographies Online Research Guide Arena Spectacles: Oxford Bibliographies Online Research Guide is written by Kathleen Coleman and published by Oxford University Press, USA. Oxford Bibliographies Online | The New York Public Library A collection of research guides for a wide variety of subjects. Includes topic overviews and annotated bibliographies. JP 07.19 Online Roman city life Oxford Bibliographies: Arena Spectacles, DOI: 10.1093/OBO/9780195389661-0004 - ... (eds.), Oxford Handbook of Roman Studies,. Oxford: OUP, 651-70. Coleman, K ... Sport-Classics (Oxford Bibliographies Online) Offering a wealth of insights to our current understanding of the role of sport and spectacle in the ancient world, "A Companion to Sport and Spectacle in Greek ...