



basic education

Department: Basic Education REPUBLIC OF SOUTH AFRICA

iphysics.com NATIONAL SENIOR CERTIFICATE

GRADE 12

PHYSICAL SCIENCES: CHEMISTRY (P2)

SICS COM

This question paper consists of 15 pages and 4 data sheets.

Physical Science P2 Grade 12 Nsc November 2014

BM King

Physical Science P2 Grade 12 Nsc November 2014:

Getting the books **Physical Science P2 Grade 12 Nsc November 2014** now is not type of challenging means. You could not and no-one else going when book accrual or library or borrowing from your links to approach them. This is an totally simple means to specifically acquire lead by on-line. This online notice Physical Science P2 Grade 12 Nsc November 2014 can be one of the options to accompany you subsequently having further time.

It will not waste your time. say you will me, the e-book will certainly publicize you extra situation to read. Just invest tiny times to admittance this on-line pronouncement **Physical Science P2 Grade 12 Nsc November 2014** as capably as evaluation them wherever you are now.

https://crm.avenza.com/files/publication/fetch.php/Service%20Request%20Letter%20Sample.pdf

Table of Contents Physical Science P2 Grade 12 Nsc November 2014

- 1. Understanding the eBook Physical Science P2 Grade 12 Nsc November 2014
 - The Rise of Digital Reading Physical Science P2 Grade 12 Nsc November 2014
 - Advantages of eBooks Over Traditional Books
- 2. Identifying Physical Science P2 Grade 12 Nsc November 2014
 - Exploring Different Genres
 - o Considering Fiction vs. Non-Fiction
 - Determining Your Reading Goals
- 3. Choosing the Right eBook Platform
 - Popular eBook Platforms
 - o Features to Look for in an Physical Science P2 Grade 12 Nsc November 2014
 - User-Friendly Interface
- 4. Exploring eBook Recommendations from Physical Science P2 Grade 12 Nsc November 2014
 - Personalized Recommendations
 - Physical Science P2 Grade 12 Nsc November 2014 User Reviews and Ratings
 - Physical Science P2 Grade 12 Nsc November 2014 and Bestseller Lists

- 5. Accessing Physical Science P2 Grade 12 Nsc November 2014 Free and Paid eBooks
 - o Physical Science P2 Grade 12 Nsc November 2014 Public Domain eBooks
 - Physical Science P2 Grade 12 Nsc November 2014 eBook Subscription Services
 - Physical Science P2 Grade 12 Nsc November 2014 Budget-Friendly Options
- 6. Navigating Physical Science P2 Grade 12 Nsc November 2014 eBook Formats
 - ∘ ePub, PDF, MOBI, and More
 - Physical Science P2 Grade 12 Nsc November 2014 Compatibility with Devices
 - Physical Science P2 Grade 12 Nsc November 2014 Enhanced eBook Features
- 7. Enhancing Your Reading Experience
 - Adjustable Fonts and Text Sizes of Physical Science P2 Grade 12 Nsc November 2014
 - Highlighting and Note-Taking Physical Science P2 Grade 12 Nsc November 2014
 - Interactive Elements Physical Science P2 Grade 12 Nsc November 2014
- 8. Staying Engaged with Physical Science P2 Grade 12 Nsc November 2014
 - o Joining Online Reading Communities
 - Participating in Virtual Book Clubs
 - Following Authors and Publishers Physical Science P2 Grade 12 Nsc November 2014
- 9. Balancing eBooks and Physical Books Physical Science P2 Grade 12 Nsc November 2014
 - Benefits of a Digital Library
 - Creating a Diverse Reading Collection Physical Science P2 Grade 12 Nsc November 2014
- 10. Overcoming Reading Challenges
 - Dealing with Digital Eye Strain
 - Minimizing Distractions
 - Managing Screen Time
- 11. Cultivating a Reading Routine Physical Science P2 Grade 12 Nsc November 2014
 - Setting Reading Goals Physical Science P2 Grade 12 Nsc November 2014
 - Carving Out Dedicated Reading Time
- 12. Sourcing Reliable Information of Physical Science P2 Grade 12 Nsc November 2014
 - Fact-Checking eBook Content of Physical Science P2 Grade 12 Nsc November 2014
 - 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

Physical Science P2 Grade 12 Nsc November 2014 Introduction

In the digital age, access to information has become easier than ever before. The ability to download Physical Science P2 Grade 12 Nsc November 2014 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 Physical Science P2 Grade 12 Nsc November 2014 has opened up a world of possibilities. Downloading Physical Science P2 Grade 12 Nsc November 2014 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 Physical Science P2 Grade 12 Nsc November 2014 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 Physical Science P2 Grade 12 Nsc November 2014. 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 Physical Science P2 Grade 12 Nsc November 2014. 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 Physical Science P2 Grade 12 Nsc November 2014, 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 Physical Science P2 Grade 12 Nsc November 2014 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 Physical Science P2 Grade 12 Nsc November 2014 Books

How do I know which eBook platform is the best for me? Finding the best eBook platform depends on your reading preferences and device compatibility. Research different platforms, read user reviews, and explore their features before making a choice. Are free eBooks of good quality? Yes, many reputable platforms offer high-quality free eBooks, including classics and public domain works. However, make sure to verify the source to ensure the eBook credibility. Can I read eBooks without an eReader? Absolutely! Most eBook platforms offer web-based readers or mobile apps that allow you to read eBooks on your computer, tablet, or smartphone. How do I avoid digital eye strain while reading eBooks? To prevent digital eye strain, take regular breaks, adjust the font size and background color, and ensure proper lighting while reading eBooks. What the advantage of interactive eBooks? Interactive eBooks incorporate multimedia elements, quizzes, and activities, enhancing the reader engagement and providing a more immersive learning experience. Physical Science P2 Grade 12 Nsc November 2014 is one of the best book in our library for free trial. We provide copy of Physical Science P2 Grade 12 Nsc November 2014 in digital format, so the resources that you find are reliable. There are also many Ebooks of related with Physical Science P2 Grade 12 Nsc November 2014. Where to download Physical Science P2 Grade 12 Nsc November 2014 online for free? Are you looking for Physical Science P2 Grade 12 Nsc November 2014 pDF? This is definitely going to save you time and cash in something you should think about.

Find Physical Science P2 Grade 12 Nsc November 2014:

service request letter sample service repair manual for saturn vue torrent service tax circulars 2007 service repair manual moto guzzi breva 1100

servis millenium washing machine manual

service manual sanyo plc xd2200

servsafe manager self study guide

serway physics 9th edition solutions manual

service marketing lovelock chapter 12

service manual whirlpool adg 6556 ixm dishwasher integratable

service tax on training fees

servis manual peugeot 406 1 8

service manual suzuki forsa gl

service manual volvo960

session a short story by

Physical Science P2 Grade 12 Nsc November 2014:

les pieds nickela c s tome 21 l inta c grale copy uniport edu - May 16 2022

web apr 15 2023 les pieds nickela c s tome 21 l inta c grale 2 8 downloaded from uniport edu ng on april 15 2023 by guest the romance of words esprios classics

les pieds nickela c s tome 20 l inta c grale pdf - Dec 11 2021

web recognizing the pretentiousness ways to acquire this ebook les pieds nickela c s tome 20 l inta c grale is additionally useful you have remained in right site to start getting

<u>les pieds nickelés tome 6 l intégrale by rené pellos</u> - Aug 19 2022

web les pieds nickels intgrale 6 tome 6 les pieds nickels fnac tlcharger le meilleur des pieds nickels tome 6 pdf les pieds nickels livres bd fnac be le meilleur des

les pieds nickela c s tome 6 l inta c grale pdf iriss ac - Jul 30 2023

web 4 les pieds nickela c s tome 6 l inta c grale 2020 08 30 sation sociale de l europe moyenne aux vie et ve siè cles av j c c rolley présente ici les contribu tions d une

les pieds nickela c s tome 29 l inta c grale 2023 - Mar 26 2023

web les pieds nickela c s tome 29 l inta c grale geological survey professional paper may 24 2021 malaysia singapore and brunei sep 27 2021 pioneers and prominent

les pieds nickela c s tome 3 l inta c grale - Nov 09 2021

web recognizing the quirk ways to acquire this ebook les pieds nickela c s tome 3 l inta c grale is additionally useful you have

remained in right site to begin getting this info get

les pieds nickela c s tome 6 l inta c grale download only - May 28 2023

web recognizing the way ways to get this ebook les pieds nickela c s tome 6 l inta c grale is additionally useful you have remained in right site to begin getting this info acquire

les pieds nickeles magazine n 6 site officiel de regis - Feb 22 2023

web les pieds nickeles magazine n 6 quelle histoire 1 planche n b scénario le mouellic bd dans revues revue et presse les pieds nickeles magazine n

les pieds nickela c s tome 20 l inta c grale - Apr 14 2022

web les pieds nickela c s tome 20 l inta c grale new developments in formal languages and applications nov 07 2021 the theory of formal languages is widely recognized as

les pieds nickela c s tome 1 l inta c grale uniport edu - Jul 18 2022

web may 3 2023 les pieds nickela c s tome 1 l inta c grale 2 7 downloaded from uniport edu ng on may 3 2023 by guest an intellectual history of the caribbean s

les pieds nickela c s tome 2 l inta c grale - Nov 21 2022

web kindly say the les pieds nickela c s tome 2 l inta c grale is universally compatible with any devices to read peter hujar paul kasmin gallery 2016 it s a vanished world and

les pieds nickela c s tome 3 l inta c grale copy - Jan 12 2022

web les pieds nickela c s tome 3 l inta c grale the effects of feeding aflatoxin contaminated swine diets with clays on performance mineral metabolism immune

les pieds nickelés les pieds nickelés r album decitre - Dec 23 2022

web dec 1 1994 les pieds nickelés les pieds nickelés r les pieds nickelés le casse des pieds nickelés les pieds nickelés profitent des vacances collection intégrale les

<u>les pieds nickela c s tome 16 l inta c grale pdf uniport edu</u> - Sep 19 2022

web apr 13 2023 les pieds nickela c s tome 16 l inta c grale 1 7 downloaded from uniport edu ng on april 13 2023 by guest les pieds nickela c s tome 16 l inta c

les pieds nickela c s tome 10 l inta c grale pdf - Apr 26 2023

web les pieds nickela c s tome 10 l inta c grale tomes 13 à 15 mar 26 2023 etre accusé d une bavure alors qu on a tiré en l air ça énerve alors on quitte la pj et on devient un

les livres de la collection les pieds nickeles decitre - Jan 24 2023

web les pieds nickeles découvrez tous les livres de la collection les pieds nickeles livres papeterie et produits culturels sur

decitre fr 3ème libraire sur internet avec un million de

les pieds nickela c s tome 14 l inta c grale pdf - Oct 21 2022

web les pieds nickela c s tome 14 l inta c grale 5 5 bientôt un potentiel hors normes rapidement esméralda lui ouvre les portes d une carrière internationale mais le destin

les pieds nickeles dans le cambouis n 60 le livre fr - Feb 10 2022

web les pieds nickeles dans le cambouis n 60 par collectif societe parisienne d edition 1970 in 4 broché etat d usage couv convenable dos satisfaisant

les pieds nickela c s tome 6 l inta c grale - Jun 28 2023

web is les pieds nickela c s tome 6 l inta c grale below les pieds nickela c s tome 6 l inta c grale 2022 03 03 lilia herman les pieds nickela c s tome 01 promoteurs

les pieds nickela c s tome 1 l inta c grale pdf wrbb neu - Jun 16 2022

web les pieds nickela c s tome 1 l inta c grale 2022 10 25 shyann bronson les pieds nickela c s tome 31 l inta c grale pdf les pieds nickeles un film de jean

les pieds nickela c s tome 1 l inta c grale pdf uniport edu - Mar 14 2022

web les pieds nickela c s tome 1 l inta c grale thank you for reading les pieds nickela c s tome 1 l inta c grale as you may know people have search numerous times for their

les pieds nickela c s tome 6 l inta c grale pdf pdf - Aug 31 2023

web les pieds nickela c s tome 6 l inta c grale pdf is available in our book collection an online access to it is set as public so you can download it instantly our digital library

les pieds nickela c s tome 6 l inta c grale pdf - Oct 09 2021

web recognizing the habit ways to get this books les pieds nickela c s tome 6 l inta c grale pdf is additionally useful you have remained in right site to start getting this info get the

eternal sabbath tome 4 Édition de 2004 glénat isbn - Sep 03 2022

web détail de l album eternal sabbath tome 4 un manga de fuyumi soryo paru en 2004 chez glénat dans la collection glénat seinen manga isbn 978 2 7234 4709 6

eternal sabbath tome 4 files climagic org - Dec~06~2022

web eternal sabbath tome 4 downloaded from files climagic org by guest fields leon wiley and putnam s literary news letter and monthly register of new books foreign and american library of alexandria for few verses in the bible is the relationship between scripture and the artistic imagination more intriguing than for the conclusion of genesis 4 eternal sabbath tome 4 pdf 2023 - Jun 12 2023

web eternal sabbath tome 4 pdf recognizing the habit ways to acquire this book eternal sabbath tome 4 pdf is additionally useful you have remained in right site to start getting this info get the eternal sabbath tome 4 pdf partner that we come up with the money for here and check out the link

eternal sabbath tome 4 by fuyumi soryo secure4 khronos - Apr 29 2022

web jun 26 2023 eternal sabbath tome 4 tome 04 es eternal sabbath is the sabbath an eternal covenant decreed by yahweh that es eternal sabbath tome 05 ebook kobo edition john 5 39 you pore over the scriptures because you presume whats wrong with the framework hypothesis answers in es eternal sabbath t04 ca soryo

9782723447096 eternal sabbath tome **4** french edition - Jul 01 2022

web eternal sabbath tome 4 french edition trouvez tous les livres de fuyumi soryo sur eurolivre fr vous pouvez commander des livres anciens et neufs comparer et acheter immédiatement au meilleur prix 9782723447096 08 02 2019 08 51 24 binding taschenbuch label glénat publisher glénat medium

eternal sabbath tome 4 mail lafamigliawv com - Mar 29 2022

web eternal sabbath tome 4 the medium and daybreak volume 5 tome ii kierkegaard and the renaissance and modern traditions theology the church of england magazine afterw the church of england and lambeth magazine wiley and putnam s literary news letter and monthly register of new books foreign and american

eternal love of dream 4 bölüm asyalog - Apr 10 2023

web eternal love of dream 4 bölüm dizi adı eternal love of dream three lives three worlds the pillow book bölüm 58 tür fantastik tarihi komedi romantik aksiyon yayın tarihi 22 ocak 2020 Çevirmen fkenan79 madbean eternal love of dream 4 bölüm qing qiu kraliçesi bai feng jiu evrendeki tek kırmızı dokuz kuyruklu tilkidir

eternal sabbath tome 4 by fuvumi sorvo - Aug 14 2023

web aug 27 2023 eternal sabbath tome 4 by fuyumi soryo es eternal sabbath tome 04 french edition fuyumi soryo used books rare books and new books page 2 black sabbath feels good to me un official fan black sabbath globaleconomy2012 download es vol 4 eternal sabbath es eternal sabbath es eternal sabbath tome 08 french

eternal sabbath tome 4 etherpad arts ac uk - Jan 07 2023

web eternal sabbath tome 4 the bookseller volume 5 tome ii kierkegaard and the renaissance and modern traditions theology eternal sabbath a complete concordance to the holy scriptures of the old and new testament oxford and cambridge undergraduate s journal the holy bible with explanatory notes practical observations

eternal love of dream 4 bölüm izle dizifon - Jul 13 2023

web 22 ocak 2020 5 771 eternal love of dream 4 bölüm izle yan chiwu nun dong hua ya meydan okumaya gittiğini ve ji heng in savaşı durdurmaya gittiğini öğrenir paylaş

eternal sabbath tome 4 by fuyumi soryo - Jan 27 2022

web sep 15 2023 april 22nd 2020 eternal sabbath tome 4 tome 04 es eternal sabbath fuyumi soryo fuyumi soryo glénat des milliers de livres avec la livraison chez vous en 1 jour ou en magasin avec 5 de réduction ou téléchargez la version ebook es eternal sabbath tome 04 by fuyumi soryo - Aug 02 2022

web sep 9 2023 april 17th 2020 achat es eternal sabbath tome 4 à prix bas sur rakuten si vous êtes fan de lecture depuis des années découvrez sans plus tarder toutes nos offres et nos bonnes affaires exceptionnelles pour l'acquisition d'un produit es eternal sabbath tome 4 pdf eternal eternal series book 1 telecharger pdf

eternal sabbath tome 4 pdf pdf bukuclone ortax - Sep 15 2023

web a m simataa 2012 05 this special and remarkablebook the seventh day sabbath and its redemptive function in god s everlasting covenant of grace by a m simataa addresses topical issues in the bible quite pertinent to the 21st century christianity

eternal sabbath tome 4 pdf hipertexto udem edu co - Nov 05 2022

web this eternal sabbath tome 4 pdf as one of the most operational sellers here will completely be in the course of the best options to review the divine hours 2001 when phyllis tickle s marvelous devotional trilogy the divine hours appeared readers responded with

eternal sabbath tome 4 de fuyumi soryo livre decitre - Oct 04 2022

web nov 17 2004 eternal sabbath tome 4 de fuyumi soryo collection seinen manga livraison gratuite à 0 01 dès 35 d achat librairie decitre votre prochain livre est là

eternal sabbath tome 4 pqr uiaf gov co - Feb 08 2023

web eternal sabbath tome 4 as recognized adventure as capably as experience nearly lesson amusement as skillfully as concord can be gotten by just checking out a books eternal sabbath tome 4 as well as it is not directly done you could bow to even more roughly this life going on for the world

eternal sabbath tome 4 by fuyumi soryo - Feb 25 2022

web aug 6 2023 march 8th 2020 buy es eternal sabbath tome 04 es eternal sabbath 4 by fuyumi soryo isbn 9782723447096 from s book store everyday low prices and free delivery on eligible orders eternal sabbath tome 4 french edition

es eternal sabbath manga tome 4 edition simple glénat - May 31 2022

web nov 15 2004 je suis un hacker mais c est dans le cerveau des gens que je suis capable de m introduire en un instant je lis les données qu il contient je modifie sa programmation et je l adapte à ma convenance je peux me faire passer pour qui je veux même un proche ou une personne décédée aux yeux de n importe qui dès qu un problème apparaît je eternal sabbath tome 4 sql gocohospitality - May 11 2023

web eternal sabbath tome 4 1 eternal sabbath tome 4 a body of practical divinity an enquiry into the constitution discipline unity worship of the primitive church by an impartial hand p king 2 pt separately dated 1691 a w pink s studies in the scriptures 1926 27 volume 3 of 17

the eternal love 4 bölüm izle asyaking - Mar 09 2023

web the eternal love 4 bölüm izle yüksek kalitede seyredebileceğiniz the eternal love 4 bölüm türkçe altyazılı izleyin asyaking Üye ol Üye girişi anasayfa dizi arşivi İletişim hakkımızda İzlediklerim the eternal love 4 bölüm kaynak 1 kaynak 2 sonra izle İzledim hata bildir sinema modu

microsoft visual c an introduction to object oriented chegg - Sep 03 2023

web unlike static pdf microsoft visual c an introduction to object oriented programming 7th edition solution manuals or printed answer keys our experts show you how to solve

programming logic and design 8th edition chapter 1 exercise 4 - Apr 29 2023

web dec 29 2015 this is a basic walkthrough of the solution for chapter 1 exercise 4 of the text programming logic and design 8th edition by joyce farrell it is an extremely close

joyce farrell profiles facebook - Feb 13 2022

java programming 9th edition solutions and answers quizlet - May 31 2023

web with expert solutions for thousands of practice problems you can take the guesswork out of studying and move forward with confidence find step by step solutions and answers to

microsoft visual c 7th edition textbook solutions bartleby - Aug 02 2023

web joyce farrell publisher cengage learning isbn 9781337102100 view more textbook editions solutions for microsoft visual c view samples chapter section problem

chapter 4 solutions programming logic and design chegg - Mar 29 2023

web step by step solution step 1 of 2 step 2 of 2 back to top corresponding textbook programming logic and design comprehensive 8th edition isbn 13 9781285982809

joyce e farrell biography stanford university - May 19 2022

web electrical engineering web page scien stanford edu jfsite print profile email profile view stanford only profile bio teaching academic appointments sr research

programming logic and design 8th edition chapter 3 - Nov 24 2022

web joyce farrell joyce farrell has authored several popular programming textbooks including books on programming logic and design java c these true false mini

programming logic and design comprehensive 8th edition - Aug 22 2022

web jan 5 2012 joyce farrell cengage learning jan 5 2012 computers 325 pages prepare beginning programmers with the most important principles for developing

programming logic design comprehensive joyce farrell - Jan 27 2023

web joyce farrell cengage learning jan 27 2017 computers 656 pages readers prepare for programming success with the fundamental principles of developing structured

answered textbook joyce farrell microsoft bartleby - Dec 26 2022

web the closer the answers are to your desired true love answers the better match the two of you are for each other for example suppose you choose the statement broccoli is

joyce farrell solutions chegg com - Oct 04 2023

web 39 rows 505 problems solved joyce farrell java programming 7th edition 620 problems solved joyce farrell bundle programming logic and design

an introduction to object oriented programming archive org - Feb 25 2023

web jun 18 2022 farrell joyce publication date 2016 topics object oriented programming computer science c computer program language visual programming computer

ae java programming cengage asia - Oct 24 2022

web jul $26\ 2017$ joyce farrell cengage learning jul $26\ 2017$ computers 784 pages develop the strong programming skills needed for professional success with farrell s

mattsblack java programming 8th edition github - Jul 01 2023

web java programs and answers from the book java programming 8th edition by joyce farrell github mattsblack java programming 8th edition java programs and answers from

programming logic and design introductory joyce farrell - Jul 21 2022

web joyce farrell is the author of many programming books for course technology a part of cengage learning her books are widely used as textbooks in higher education institutions

joyce farrell wikipedia - Jun 19 2022

web joyce farrell biography publications teaching scien biography joyce graduated from the university of california at san diego in 1976 with a b s in experimental psychology

is that james joyce joycean style as a punchline - Mar 17 2022

web view the profiles of people named joyce farrell join facebook to connect with joyce farrell and others you may know facebook gives people the power to

 $\textit{microsoft visual c an introduction to object oriented} \cdot Sep~22~2022$

web isbn 9781285776712 joyce farrell sorry we don t have content for this book yet find step by step expert solutions for your textbook or homework problem find step by step

joyce farrell s profile stanford profiles - Apr 17 2022

web an article from the straight dope s website addresses a reader s question as to whether finnegans wake was meant purely as a literary practical joke a theory advanced by