

Cryptography Network Security Solution Forouzan

(PDF) Solution Manual Cryptography and Network Security ...
SOLUTIONS MANUAL - WordPress.com

Cryptography Network Security by Forouzan, Behrouz A ...
Solutions Manual for Cryptography and Network Security 1st ...
Cryptography & Network Security: Amazon.co.uk: Behrouz A ...
Cryptography And Network Security Forouzan Solution Manual ...

Cryptography and Network Security solution chapter 1 Solution Manual for Cryptography and Network Security - Behrouz Forouzan **Cryptography and Network Security, Chapter 8 Solution Manual for Cryptography and Network Security - Behrouz Forouzan 36# CompTIA Advanced Security Practitioner - 5.3 Advanced Network Design - Cryptographic Solutions Nptel assignment solution 2020**
Cryptography and Network security week 7 Assignment 7 Elliptic Curve Cryptography | ECC in Cryptography and Network Security INFORMATION AND NETWORK SECURITY || INTRODUCTION || LECTURE 1 || HiralShastri Public Key Infrastructure(PKI) **Solution Manual for Cryptography and Network Security - William Stallings NETWORK SECURITY - BLOCK CIPHER MODES OF OPERATION** How To Download Any Book And Its Solution Manual Free From Internet in PDF Format! **A complete overview of SSL/TLS and its cryptographic system** Cyber Security Full Course for Beginner Learn how secret messages are created using an early encryption machine Cryptography Lesson #1 - Block Ciphers Elliptic Curves - Computerphile

Symmetric Key and Public Key Encryption Elgamal Cryptosystem | Asymmetric Key Encryption Algorithm | Public Key Cryptography Asymmetric encryption - Simply explained Key Distribution Center (KDC) explained in Hindi || Network security || Kerberos || Akant 360 **NETWORK SECURITY - DES (DATA ENCRYPTION STANDARD) ALGORITHM** Elgamal Cryptosystem - Public key Cryptography - Cyber Security - CSE4003 NETWORK SECURITY - KERBEROS (AUTHENTICATION APPLICATION) || MCQ in Network Layer: Internet Protocol | Forouzan || **MCQ in Network Models | Forouzan || MCQ in Analog Transmission | Forouzan** JCE EC Network Cyber Security 18EC835-Rasane **Network Security Tutorial | Introduction to Network Security | Network Security Tools | Edureka**
CHAPTER 2 Mathematics of Cryptography Part I
Cryptography And Network Security Forouzan Pdf - renewworx
Cryptography And Network Security By William Stallings 5th ...
[EPUB] Cryptography Network Security
Cryptography & Network Security (Sie) 2E - Forouzan ...
Cryptography Network Security by Behrouz Forouzan - AbeBooks
Solution Manual For Cryptography and Network Security 1st ...
Cryptography & Network Security (McGraw-Hill Forouzan ...
Cryptography and Network Security Forouzan - Copy.pdf ...
Solution Manual for Cryptography and Network Security ...
Cryptography Network Security Solution Forouzan
Cryptography And Network Security Forouzan Solution Manual ...

Cryptography Network Security Solution Forouzan

Downloaded from archive.imba.com by guest

REED MCKAYLA

(PDF) Solution Manual Cryptography and Network Security ... Cryptography and Network Security solution chapter 1 Solution Manual for Cryptography and Network Security - Behrouz Forouzan **Cryptography and Network Security, Chapter 8 Solution Manual for Cryptography and Network Security - Behrouz Forouzan 36# CompTIA Advanced Security Practitioner - 5.3 Advanced Network**

Design - Cryptographic Solutions Nptel assignment solution 2020 **Cryptography and Network security week 7 Assignment 7** Elliptic Curve Cryptography | ECC in Cryptography and Network Security INFORMATION AND NETWORK SECURITY || INTRODUCTION || LECTURE 1 || HiralShastri Public Key Infrastructure(PKI) **Solution Manual for Cryptography and Network Security - William Stallings NETWORK SECURITY - BLOCK CIPHER MODES OF OPERATION** How To Download Any Book And Its Solution Manual Free From Internet in PDF Format! **A complete overview of SSL/TLS and its cryptographic system** Cyber Security Full Course for Beginner Learn how secret messages are created using an early encryption machine Cryptography Lesson #1 - Block Ciphers Elliptic

Curves - Computerphile

Symmetric Key and Public Key Encryption *Elgamal Cryptosystem* | *Asymmetric Key Encryption Algorithm* | *Public Key Cryptography Asymmetric encryption - Simply explained* Key-Distribution Center (KDC) explained in Hindi || Network-security || Kerberos || Akant 360 **NETWORK SECURITY - DES (DATA ENCRYPTION STANDARD) ALGORITHM** Elgamal Cryptosystem - Public key Cryptography - Cyber Security - CSE4003 NETWORK SECURITY - KERBEROS (AUTHENTICATION APPLICATION) MCQ in Network Layer: Internet Protocol | Forouzan MCQ in Network Models | Forouzan MCQ in Analog Transmission | Forouzan JCE-EC Network Cyber Security 18EC835 Rasane **Network Security Tutorial | Introduction to Network Security | Network Security Tools | Edureka** Cryptography Network Security Solution Forouzan Solution Manual for Cryptography & Network Security - 1st Edition Author(s) : Behrouz Forouzan This product include Solution Manual and Power Point slides for all chapters of textbook (chapters 1 to 18). There is one PDF file as solution manual(PDF) Solution Manual Cryptography and Network Security ...Sign in. Cryptography and Network Security Forouzan - Copy.pdf - Google Drive. Sign in Cryptography and Network Security Forouzan - Copy.pdf ...Solution Manual for Cryptography and Network Security - Behrouz Forouzan November 30, 2019 Computer Engineering and Science, Solution Manual for Computer Books Delivery is INSTANT, no waiting and no delay time. it means that you can download the files IMMEDIATELY once payment done. Solution Manual for Cryptography and Network Security ...Feb 02 2020 cryptography-and-network-security-forouzan-solution-manual. 1/6.. edition solution manual, it is entirely simple then, past currently we extend the join to buy and ... Cryptography and Network Security Notes Pdf: Download. Cryptography And Network Security Forouzan Solution Manual ...Cryptography Network Security Solution Forouzan Cryptography & Network Security (McGraw-Hill Forouzan Cryptography And Network Security Forouzan Solution Manual Pdf Download -> DOWNLOAD (Mirror #1) 4c5316f046 Kiehl's is an American cosmetics brand retailer that specializes in premium skin, hair, and body care products Cryptography And Network Security ...[EPUB] Cryptography Network Security A textbook for beginners in security. In this new first edition, well-known author Behrouz Forouzan uses his accessible writing style and visual approach to simplify the difficult concepts of cryptography and network security. This edition also provides a website that includes Powerpoint files as well as instructor and students solutions manuals. Forouzan presents difficult security topics from the ground up. Cryptography & Network Security (McGraw-Hill Forouzan ...Cryptography & Network Security (Sie) 2E. Forouzan. McGraw-Hill Education (India) Pvt Limited. 6 Reviews. What people are saying - Write a review. User ratings. 5 stars: 4: 4 stars: 0: 3 stars: 1: 2 stars: 0: 1 star: 0: User Review - Flag as inappropriate. unlike william stalings, this book is very easy to understand. Cryptography & Network Security (Sie) 2E - Forouzan ... $d = \gcd(a, b) = 3$ divides c , there is an infinite number of solutions. The reduced equation is $13x + 5y = 90$. We solve the equation $13s + 5t = 1$: $s = 2$ and $t = -5$. The particular and general solutions are To find an acceptable solution (nonnegative values) for x and y , we need to start with negative values for k . CHAPTER 2 Mathematics of Cryptography Part I Cryptography And Network Security By Behrouz A Forouzan Pdf Free Download DOWNLOAD (Mirror #1). Amazon.in - Buy Cryptography & Network Security (McGraw-Hill Forouzan Networking) book online at best prices in India on Amazon.in. Read

Cryptography & Network Security (McGraw-Hill Forouzan Networking) book reviews & author details and more at Amazon.in. Free delivery on qualified orders. Cryptography And Network Security Forouzan Pdf - renewworxx = $1 + 2K1 = 2 + 3K2 = 3 + 4K3 = 4 + K4 = 5 + 6K5 = 6 + 5K6 = 7K7$. where the K are integers; i.e., $(1) x \equiv 1 \pmod{2}$; $(2) x \equiv 2 \pmod{3}$; $(3) x \equiv 3 \pmod{4}$; $(4) x \equiv 4 \pmod{1}$; $(5) x \equiv 5 \pmod{6}$; $(6) x \equiv 6 \pmod{5}$; $(7) x \equiv 0 \pmod{7}$. Of these congruences, (4) is no restriction, and (1) and (2) are included in (3) and (5). SOLUTIONS MANUAL - WordPress.com Cryptography And Network Security Forouzan Solution Manual Pdf Download -> DOWNLOAD (Mirror #1) 4c5316f046 Kiehl's is an American cosmetics brand retailer that specializes in premium skin, hair, and body care products.. Cryptography And Network Security Forouzan Solution Manual ...Buy Cryptography & Network Security by Behrouz A Forouzan (ISBN: 9780071102230) from Amazon's Book Store. Everyday low prices and free delivery on eligible orders. Cryptography & Network Security: Amazon.co.uk: Behrouz A ...Solution Manual For Cryptography and Network Security 1st Edition by Behrouz A. Forouzan. \$ 30.00. Format : Digital copy DOC DOCX PDF RTF in "ZIP file". Time: Immediately after payment is completed. Categories : Solution manuals, TestBank. All the chapters are included. Solution Manual For Cryptography and Network Security 1st ...Download FREE Sample Here for Solutions Manual for Cryptography and Network Security 1st Edition by Behrouz Forouzan. Note : this is not a text book. File Format : PDF or Word. Product Description Complete downloadable Solutions Manual for Cryptography and Network Security 1st Edition by Behrouz Forouzan. Solutions Manual for Cryptography and Network Security 1st ...Cryptography and Network Security continues the Forouzan Mr. usual style. easy-to-understand manner comprehensive exposition of cryptography and computer networks The security issues are involved in all aspects of content. from a global perspective. introduced the concept of computer network security architecture and patterns. Cryptography Network Security by Behrouz Forouzan - AbeBooks Cryptography And Network Security By Stallings' Cryptography and Network Security, Seventh Edition, introduces the reader to the compelling and evolving field of cryptography and network security. In an age of viruses and hackers, electronic eavesdropping, and electronic fraud on a global scale, security is paramount. Cryptography And Network Security By William Stallings 5th ...In this new first edition, well-known author Behrouz Forouzan uses his accessible writing style and visual approach to simplify the difficult concepts of cryptography and network security. While many security books assume knowledge of number theory and advanced math, or present mainly theoretical ideas, Forouzan presents difficult security topics from the ground up. Cryptography Network Security by Forouzan, Behrouz A ...3.84 · Rating details · 145 ratings · 7 reviews. A textbook for beginners in security. In this new first edition, well-known author Behrouz Forouzan uses his accessible writing style and visual approach to simplify the difficult concepts of cryptography and network security. This edition also provides a website that includes Powerpoint files as well as instructor and students solutions manuals. $d = \gcd(a, b) = 3$ divides c , there is an infinite number of solutions. The reduced equation is $13x + 5y = 90$. We solve the equation $13s + 5t = 1$: $s = 2$ and $t = -5$. The particular and general solutions are To find an acceptable solution (nonnegative values) for x and y , we need to start with negative values for k . SOLUTIONS MANUAL - WordPress.com

Cryptography Network Security Solution Forouzan Cryptography & Network Security (McGraw-Hill Forouzan Cryptography And Network Security Forouzan Solution Manual Pdf Download -> DOWNLOAD (Mirror #1) 4c5316f046 Kiehl's is an American cosmetics brand retailer that specializes in premium skin, hair, and body care products Cryptography And Network Security ...
 Cryptography Network Security by Forouzan, Behrouz A ...
 $x = 1 + 2K1 = 2 + 3K2 = 3 + 4K3 = 4 + K4 = 5 + 6K5 = 6 + 5K6 = 7K7$. where the K are integers; i.e.,
 (1) $x \equiv 1 \pmod{2}$; (2) $x \equiv 2 \pmod{3}$; (3) $x \equiv 3 \pmod{4}$; (4) $x \equiv 4 \pmod{1}$; (5) $x \equiv 5 \pmod{6}$; (6) $x \equiv 6 \pmod{5}$; (7) $x \equiv 0 \pmod{7}$. Of these congruences, (4) is no restriction, and (1) and (2) are included in (3) and (5).

Solutions Manual for Cryptography and Network Security 1st ...

Cryptography & Network Security: Amazon.co.uk: Behrouz A ...

Download FREE Sample Here for Solutions Manual for Cryptography and Network Security 1st Edition by Behrouz Forouzan. Note : this is not a text book. File Format : PDF or Word. Product Description Complete downloadable Solutions Manual for Cryptography and Network Security 1st Edition by Behrouz Forouzan.

Cryptography And Network Security Forouzan Solution Manual ...

Sign in. Cryptography and Network Security Forouzan - Copy.pdf - Google Drive. Sign in
 Cryptography and Network Security solution chapter 1 Solution Manual for Cryptography and Network Security - Behrouz Forouzan **Cryptography and Network Security, Chapter 8 Solution Manual for Cryptography and Network Security - Behrouz Forouzan 36# CompTIA Advanced Security Practitioner - 5.3 Advanced Network Design - Cryptographic Solutions Nptel assignment solution 2020 Cryptography and Network security week 7 Assignment 7** Elliptic Curve Cryptography | ECC in Cryptography and Network Security INFORMATION AND NETWORK SECURITY || INTRODUCTION || LECTURE 1 || Hiral Shastri Public Key Infrastructure(PKI) Solution Manual for Cryptography and Network Security - William Stallings **NETWORK SECURITY - BLOCK CIPHER MODES OF OPERATION** How To Download Any Book And Its Solution Manual Free From Internet in PDF Format! A complete overview of SSL/TLS and its cryptographic system Cyber Security Full Course for Beginner Learn how secret messages are created using an early encryption machine Cryptography Lesson #1 - Block Ciphers Elliptic Curves - Computerphile

Symmetric Key and Public Key Encryption Elgamal Cryptosystem | Asymmetric Key Encryption Algorithm | Public Key Cryptography Asymmetric encryption - Simply explained Key Distribution Center (KDC) explained in Hindi || Network security || Kerberos || Akant 360 **NETWORK SECURITY - DES (DATA ENCRYPTION STANDARD) ALGORITHM** Elgamal Cryptosystem - Public key Cryptography - Cyber Security - CSE4003 NETWORK SECURITY - KERBEROS (AUTHENTICATION APPLICATION) MCQ in Network Layer: Internet Protocol | Forouzan MCQ in Network Models | Forouzan MCQ in Analog Transmission | Forouzan JCE EC Network \u0026 Cyber Security 18EC835 Rasane **Network Security Tutorial | Introduction to Network Security | Network Security Tools | Edureka**

Solution Manual for Cryptography and Network Security - Behrouz Forouzan November 30, 2019 Computer Engineering and Science, Solution Manual for Computer Books Delivery is INSTANT, no

waiting and no delay time. it means that you can download the files IMMEDIATELY once payment done.

CHAPTER 2 Mathematics of Cryptography Part I

Feb 02 2020 cryptography-and-network-security-forouzan-solution-manual. 1/6.. edition solution manual, it is entirely simple then, past currently we extend the join to buy and ... Cryptography and Network Security Notes Pdf: Download.

Cryptography And Network Security Forouzan Pdf - renewworx

Cryptography and Network Security continues the Forouzan Mr. usual style. easy-to-understand manner comprehensive exposition of cryptography and computer networks The security issues are involved in all aspects of content. from a global perspective. introduced the concept of computer network security architecture and patterns.

Cryptography And Network Security By William Stallings 5th ...

Cryptography And Network Security Forouzan Solution Manual Pdf Download -> DOWNLOAD (Mirror #1) 4c5316f046 Kiehl's is an American cosmetics brand retailer that specializes in premium skin, hair, and body care products..

[EPUB] Cryptography Network Security

Cryptography And Network Security By Behrouz A Forouzan Pdf Free Download DOWNLOAD (Mirror #1). Amazon.in - Buy Cryptography & Network Security (McGraw-Hill Forouzan Networking) book online at best prices in India on Amazon.in. Read Cryptography & Network Security (McGraw-Hill Forouzan Networking) book reviews & author details and more at Amazon.in. Free delivery on qualified orders.

Cryptography & Network Security (Sie) 2E - Forouzan ...

Solution Manual for Cryptography & Network Security - 1st Edition Author(s) : Behrouz Forouzan This product include Solution Manual and Power Point slides for all chapters of textbook (chapters 1 to 18). There is one PDF file as solution manual

Cryptography Network Security by Behrouz Forouzan - AbeBooks

3.84 · Rating details · 145 ratings · 7 reviews. A textbook for beginners in security. In this new first edition, well-known author Behrouz Forouzan uses his accessible writing style and visual approach to simplify the difficult concepts of cryptography and network security. This edition also provides a website that includes Powerpoint files as well as instructor and students solutions manuals.

Solution Manual For Cryptography and Network Security 1st ...

Cryptography & Network Security (Sie) 2E. Forouzan. McGraw-Hill Education (India) Pvt Limited. 6 Reviews. What people are saying - Write a review. User ratings. 5 stars: 4: 4 stars: 0: 3 stars: 1: 2 stars: 0: 1 star: 0: User Review - Flag as inappropriate. unlike william stalings, this book is very easy to understand.

Cryptography & Network Security (McGraw-Hill Forouzan ...

A textbook for beginners in security. In this new first edition, well-known author Behrouz Forouzan uses his accessible writing style and visual approach to simplify the difficult concepts of cryptography and network security. This edition also provides a website that includes Powerpoint files as well as instructor and students solutions manuals. Forouzan presents difficult security topics from the ground up.

Cryptography and Network Security Forouzan - Copy.pdf ...

Buy Cryptography & Network Security by Behrouz A Forouzan (ISBN: 9780071102230) from Amazon's Book Store. Everyday low prices and free delivery on eligible orders.

[Solution Manual for Cryptography and Network Security ...](#)

Solution Manual For Cryptography and Network Security 1st Edition by Behrouz A. Forouzan. \$ 30.00. Format : Digital copy DOC DOCX PDF RTF in "ZIP file". Time: Immediately after payment is completed. Categories : Solution manuals, TestBank. All the chapters are included.

[Cryptography Network Security Solution Forouzan](#)

[Cryptography and Network Security solution chapter 1](#) [Solution Manual for Cryptography and Network Security - Behrouz Forouzan](#) **Cryptography and Network Security, Chapter 8** [Solution Manual for Cryptography and Network Security - Behrouz Forouzan 36#](#) [CompTIA Advanced Security Practitioner - 5.3 Advanced Network Design - Cryptographic Solutions](#) **Nptel assignment solution**

2020 Cryptography and Network security week 7 Assignment 7 [Elliptic Curve Cryptography | ECC in Cryptography and Network Security](#) [INFORMATION AND NETWORK SECURITY || INTRODUCTION || LECTURE 1 || Hiral Shastri](#) [Public Key Infrastructure \(PKI\)](#) [Solution Manual for Cryptography and Network Security - William Stallings](#) **NETWORK SECURITY - BLOCK CIPHER MODES OF OPERATION** [How To Download Any Book And Its Solution Manual Free From Internet in PDF Format!](#) [A complete overview of SSL/TLS and its cryptographic system](#) [Cyber Security Full Course for Beginner Learn how secret messages are created using an early encryption machine](#) [Cryptography Lesson #1 - Block Ciphers Elliptic Curves - Computerphile](#)

[How To Download Any Book And Its Solution Manual Free From Internet in PDF Format!](#) [A complete overview of SSL/TLS and its cryptographic system](#) [Cyber Security Full Course for Beginner Learn how secret messages are created using an early encryption machine](#) [Cryptography Lesson #1 - Block Ciphers Elliptic Curves - Computerphile](#)

[INFORMATION AND NETWORK SECURITY || INTRODUCTION || LECTURE 1 || Hiral Shastri](#) [Public Key Infrastructure \(PKI\)](#) [Solution Manual for Cryptography and Network Security - William Stallings](#) **NETWORK SECURITY - BLOCK CIPHER MODES OF OPERATION** [How To Download Any Book And Its Solution Manual Free From Internet in PDF Format!](#) [A complete overview of SSL/TLS and its cryptographic system](#) [Cyber Security Full Course for Beginner Learn how secret messages are created using an early encryption machine](#) [Cryptography Lesson #1 - Block Ciphers Elliptic Curves - Computerphile](#)

[INFORMATION AND NETWORK SECURITY || INTRODUCTION || LECTURE 1 || Hiral Shastri](#) [Public Key Infrastructure \(PKI\)](#) [Solution Manual for Cryptography and Network Security - William Stallings](#) **NETWORK SECURITY - BLOCK CIPHER MODES OF OPERATION** [How To Download Any Book And Its Solution Manual Free From Internet in PDF Format!](#) [A complete overview of SSL/TLS and its cryptographic system](#) [Cyber Security Full Course for Beginner Learn how secret messages are created using an early encryption machine](#) [Cryptography Lesson #1 - Block Ciphers Elliptic Curves - Computerphile](#)

[INFORMATION AND NETWORK SECURITY || INTRODUCTION || LECTURE 1 || Hiral Shastri](#) [Public Key Infrastructure \(PKI\)](#) [Solution Manual for Cryptography and Network Security - William Stallings](#) **NETWORK SECURITY - BLOCK CIPHER MODES OF OPERATION** [How To Download Any Book And Its Solution Manual Free From Internet in PDF Format!](#) [A complete overview of SSL/TLS and its cryptographic system](#) [Cyber Security Full Course for Beginner Learn how secret messages are created using an early encryption machine](#) [Cryptography Lesson #1 - Block Ciphers Elliptic Curves - Computerphile](#)

[INFORMATION AND NETWORK SECURITY || INTRODUCTION || LECTURE 1 || Hiral Shastri](#) [Public Key Infrastructure \(PKI\)](#) [Solution Manual for Cryptography and Network Security - William Stallings](#) **NETWORK SECURITY - BLOCK CIPHER MODES OF OPERATION** [How To Download Any Book And Its Solution Manual Free From Internet in PDF Format!](#) [A complete overview of SSL/TLS and its cryptographic system](#) [Cyber Security Full Course for Beginner Learn how secret messages are created using an early encryption machine](#) [Cryptography Lesson #1 - Block Ciphers Elliptic Curves - Computerphile](#)

[INFORMATION AND NETWORK SECURITY || INTRODUCTION || LECTURE 1 || Hiral Shastri](#) [Public Key Infrastructure \(PKI\)](#) [Solution Manual for Cryptography and Network Security - William Stallings](#) **NETWORK SECURITY - BLOCK CIPHER MODES OF OPERATION** [How To Download Any Book And Its Solution Manual Free From Internet in PDF Format!](#) [A complete overview of SSL/TLS and its cryptographic system](#) [Cyber Security Full Course for Beginner Learn how secret messages are created using an early encryption machine](#) [Cryptography Lesson #1 - Block Ciphers Elliptic Curves - Computerphile](#)

Related with Cryptography Network Security Solution Forouzan:

- Spare Prince Harry Ebook : [click here](#)

Symmetric Key and Public Key Encryption [Elgamal Cryptosystem](#) | [Asymmetric Key Encryption Algorithm](#) | [Public Key Cryptography Asymmetric encryption - Simply explained](#) [Key Distribution Center \(KDC\) explained in Hindi](#) || [Network security](#) || [Kerberos](#) || [Akant 360](#) **NETWORK SECURITY - DES (DATA ENCRYPTION STANDARD) ALGORITHM** [Elgamal Cryptosystem - Public key Cryptography - Cyber Security - CSE4003](#) [NETWORK SECURITY - KERBEROS \(AUTHENTICATION APPLICATION\)](#) □ [MCQ in Network Layer: Internet Protocol](#) | [Forouzan](#) □ **MCQ in Network Models** | [Forouzan](#) □ **MCQ in Analog Transmission** | [Forouzan](#) [JCE-EC Network \u0026 Cyber Security 18EC835](#) [Rasane](#) **Network Security Tutorial** | **Introduction to Network Security** | **Network Security Tools** | **Eureka**

[Cryptography And Network Security Forouzan Solution Manual ...](#)

Cryptography And Network Security By Stallings' Cryptography and Network Security, Seventh Edition, introduces the reader to the compelling and evolving field of cryptography and network security. In an age of viruses and hackers, electronic eavesdropping, and electronic fraud on a global scale, security is paramount.

In this new first edition, well-known author Behrouz Forouzan uses his accessible writing style and visual approach to simplify the difficult concepts of cryptography and network security. While many security books assume knowledge of number theory and advanced math, or present mainly theoretical ideas, Forouzan presents difficult security topics from the ground up.