

Suppose that there are some instructions that are loaded in memory as follows

Suppose that there are some instructions that are loaded in memory as follows.

| address | instruction |
|---------|-------------|
| 350 | 1942 |
| 351 | 2945 |
| 352 | 5947 |
| 353 | 1950 |
| 354 | 3951 |
| 355 | 4952 |

| PC | IR |
|-----|------|
| 351 | 1942 |
| 351 | 2945 |
| 352 | 2945 |
| 352 | 5947 |
| 353 | 5947 |
| 353 | 1950 |
| 354 | 1950 |
| 354 | 3951 |
| 355 | 3951 |
| 355 | 4952 |

Assuming that instructions are executed sequentially and the current PC value is set as 351, what will be the content of the Program Counter (PC) and instruction Register (IR) values at each step of execution?

26/60

Suppose that there are some instructions(16 bits) are loaded in memory as follows. The memory

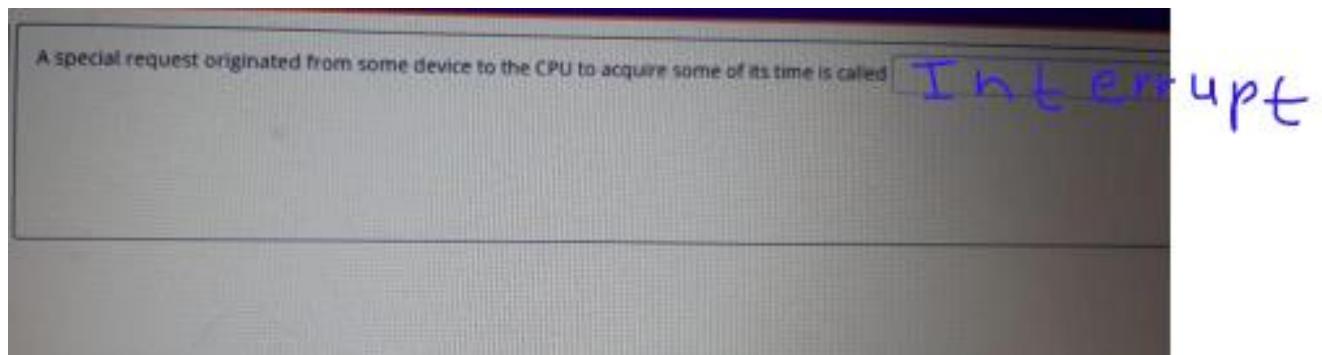
Suppose that there are some instructions (16 bits) are loaded in memory as follows. The memory addresses are given in hexadecimal values and the current PC value is set as 351.

| address | instruction |
|---------|-------------|
| 350 | 1942 |
| 351 | 2945 |
| 352 | 5947 |
| 353 | 1950 |
| 354 | 3951 |

| PC | memory address |
|-----|----------------|
| 351 | 942 |
| 351 | 945 |
| 352 | 945 |
| 352 | 947 |
| 353 | 947 |
| 353 | 950 |
| 354 | 950 |
| 354 | 951 |

Most significant four bits indicate the opcode and other bits represent the operand reference. What are the memory addresses of above instructions pointing at to fetch instruction/data ()?

a special request originate from som device to the CPU to aquire some of its time is called



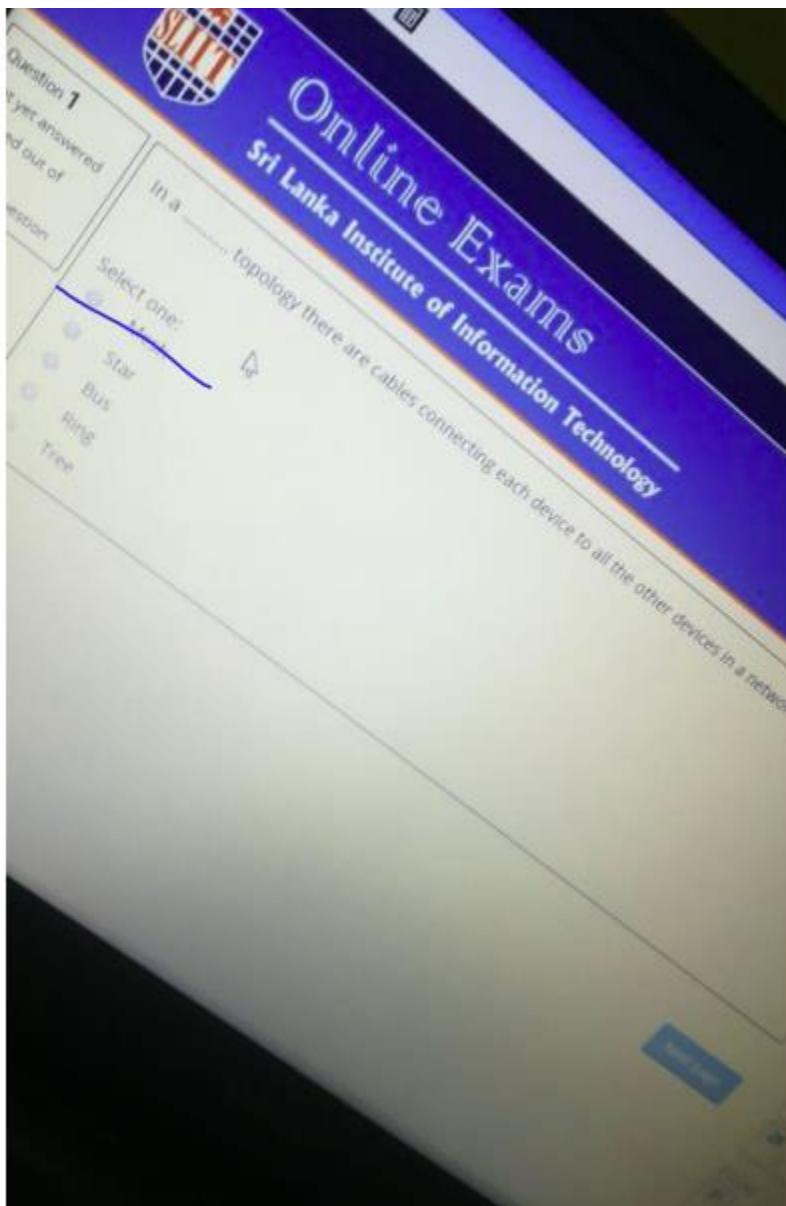
What does a protocol define?

What does a Protocol define?

Select one:

- Protocol defines what data is communicated.
- Protocol defines how data is communicated.
- Protocol defines when data is communicated.
- Protocol defines why data is communicated.
- None of the mentioned is true.

In a Topology there are cables connecting each device to all the other devices in a network



Convert 1520 bits into bytes

Convert 1520 bits into bytes

Select one:

- a. 190 bytes
- b. 180 bytes
- c. 182 bytes
- d. 175 bytes
- e. 152 bytes

In a regular network, which of the following can be a software?

In a regular network, which of the following can be a Software?

Select one:

- Router
- Firewall
- Modem
- Hub
- Switch

Which of the following is NOT a correct statement regarding Firewalls?

Which of the following is NOT a correct statement regarding Firewalls?

Select one:

- a. A Firewall resides between two or more networks.
- b. A firewall controls traffic and helps prevent unauthorized access.
- c.
Packet Filtering is a method used in Firewalls. ✓
- d. URL Filtering is a method used in Firewalls. ✓
- e. Firewall can provide 100% security to a network. ✗

Which of the following statement is true?

Which of the following statement is true?

Select one:

- a. IP Address is a physical Address X
- b. MAC Address is logical address X
- c. IP Address is a logical Address and MAC Address is a physical Address ✓
- d. IP Address is a physical Address and MAC Address is a logical Address X
- e. Both IP and MAC addresses are virtual addresses X

[Next page](#)

Mutability of storage devices explains

Mutability of storage devices explains

Select one:

- a. How storage locations are addressed.
- b. What happens to the content when power is not available
- c. How storage locations are addresses
- d. Time latency due to seek time and rotational delay
- e. Weather the content is read/write or read only ✓

Which of these is not an activity the OS does to manage storage

Which of these is not an activity the OS does to manage storage

Select one:

- a. Create and delete files
- b. Allocating storage
- c. Free-space management
- d. Hardware maintenance
- e. Backup

An attacker trying to manipulate individuals into performing actions or divulging confidential information is known as social Engineering

An attacker trying to manipulate individuals into performing actions or divulging confidential information is known as Social Engineering.

Select one:

- True
- False

Which of the following statement is correct?

Which of the following statements is correct?

Select one:

- a. A failure in Network layer affects transport layer
- b. A failure in Network layer affects Data Link layer
- c. A failure in Network layer affects entire communication
- d. A failure in Network layer stops the device from working entirely
- e. A failure in Network layer crashes the application

Selecting the incorrect statement regarding the data

Select the incorrect statement regarding data

Select one:

- a. ASCII is an 7-bit code for 128 different characters.
- b. Data representation refers to the form in which data is stored, processed, and transmitted
- c. Digitization is the process of converting analog data into digital data.
- d. Numeric, alphabetic, special, alpha-numeric are different types of character data.
- e. One-bit parity is an error correction technique used in data storing and transmission.

select the correct order of ISO-OSI layered reference model

Select the correct order of ISO-OSI layered reference model.

| | | |
|---------|-----------|-------|
| Layer 7 | Choose... | A pp |
| Layer 6 | Choose... | Prot |
| Layer 5 | Choose... | sos |
| Layer 4 | Choose... | Tranc |
| Layer 3 | Choose... | Netwo |
| Layer 2 | Choose... | Dat |
| Layer 1 | Choose... | physc |

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An unauthorized user is a network issue

An unauthorized user is a network _____ issue.

Select one:

- security
- reliability
- scalability
- quality of service
- availability

Select the correct elements/ components that make up a network

Select the correct elements/components that make up a network.

Select one:

- Service, Medium, Packet, Protocols.
- Device, Wire, Message, Rules.
- Service, Medium, Packet, Rules.
- Device, Medium, Message, Rules:
- Device, Medium, Message, Protocols.

Devices on one network can communicate with devices on another network via (Select two)

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Select one or more:

- Router
- Multiplexer X
- Hub
- Printer X
- Gateway

Steps of an instruction cycle is given below

Steps of an instruction cycle is given below

- A. Instruction fetch (1)
- B. Data operation (4)
- C. Instruction operation decoding (2)
- D. Data store (5)
- E. Operand fetch (3)

Find the correct order of execution.

Select one:

- a. A, C, B, D, E
- b. B, A, C, D, E
- c. B, A, E, C, D
- d. D, C, A, B, E
- e. A, C, E, B, D

Select the continuous data of the following

Select the continuous data of the following

Select one:

- a. Number of members of a family.
- b. Pages of a book.
- c. Number of students in SLIIT.
- d. Average of the three Subjects.
- e. Number of subjects we learn.

Which of the following statement is true

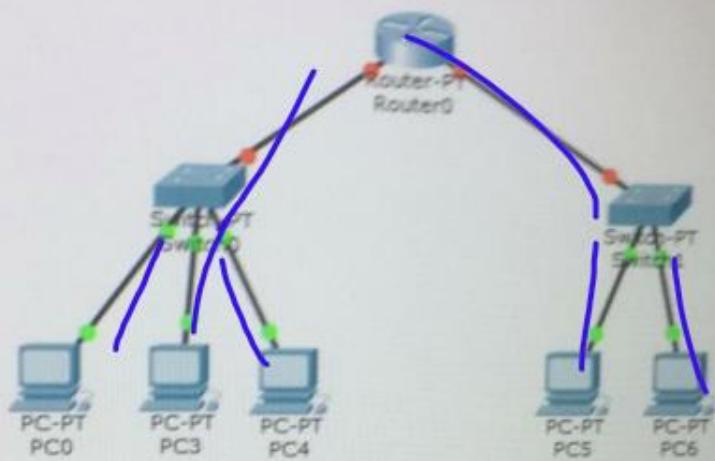
Which of the following statement is true?

Select one:

- a. IP Address is a physical Address
- b. MAC Address is logical address
- c. IP Address is a logical Address and MAC Address is a physical Address
- d. IP Address is a physical Address and MAC Address is a logical Address
- e. Both IP and MAC addresses are virtual addresses

Which of the following statements describe the network shown in the graphic?

Which of the following statements describe the network shown in the graphic? (Select two)



Select one or more:

- There are total number of two broadcast domains in the network.
- There are total number of six broadcast domains in the network.
- There are total number of four broadcast domains in the network.
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Which of the following pairs denote the two main types that the RAM is

Which of the following pairs denote the two main types that the RAM is

Select one:

- a. SRAM and DRAM
- b. SRAM and DDRAM
- c. SDRAM and SRAM
- d. DRAM and VRAM
- e. VVRAM and SRAM

Steps of designing a digital circuit to solve a real world problem is given below

Steps of designing a digital circuit to solve a real world problem is given below:

- A. K-maps are used to simplify the equations 4
- B. The truth table is developed 3
- C. Implemented using logic gates 5
- D. The problem is analyzed 1
- E. Identify input variables and output variables 2

Find the correct order of execution.

Select one:

- a. A, C, B, D, E
- b. D, C, B, E, A
- c. B, D, E, C, A
- d. D, E, B, A, C
- e. A, C, E, B, D

the instruction currently being execute is stored in

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Select one:

- a. Instruction register
- b. Instruction pointer
- c. Program counter
- d. Data register
- e. Accumulator

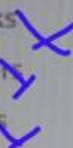


what method is used to input data in the 1st generation computers from the given below

What method is used to input data in the 1st generation computers from the given below

Select one:

- a. Floppy disks
- b. Flash drives
- c. USB drivers
- d. Punch cards
- e. Compact disks



Which of the following program converts instructions to machine language

Which of the following program converts instructions to machine language?

Select one:

- a. Compressor
- b. Compiler
- c. Integrator
- d. Simulator
- e. None of the above

Select the continuous data of the following

Select the continuous data of the following

Select one:

- a. Number of members of a family.
- b. Pages of a book.
- c. Number of students in SLIIT.
- d. Average of the three Subjects.
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an attacker trying to manipulate individuals into performing actions or divulging confidential information is known as social engineering

An attacker trying to manipulate individuals into performing actions or divulging confidential information is known as Social Engineering.

Select one:

True

False

match the correct port category description to port numbers

Match the correct port category description to port numbers.

| | |
|------------------------------|--|
| Well-known port numbers | <input type="button" value="Choose..."/> |
| Registered port numbers | <input type="button" value="Choose..."/> 0 to 65535 49152 to 65535 |
| Dynamic/Private port numbers | <input type="button" value="Choose..."/> 0 to 1023 1024 to 49151 |

development of software for computers was started in

Information Technology

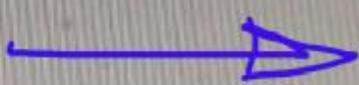
Development of software for computers was started in

Select one:

- a. 1st Generation
- b. 2nd Generation
- c. 3rd Generation
- d. 4th Generation
- e. 5th Generation

Which bus is condirectional

Which bus is unidirectional



Select one:

- a. Address bus
- b. Control bus
- c. Signal bus
- d. Current bus
- e. Data bus

What is the correct statement about a broadcast domain

Online Exams

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What is the correct statement about a Broadcast Domain?

Select one:

A collection or two or more computers in which, when one sender sends a message, it is received by all the others in the same domain.

A collection or two or more computers in which, when one sender sends a message, it is received by a group of computers in the same domain.

A collection or two or more computers in which, when one sender sends a message, it is received by one receiver in a different domain.

A collection or two or more computers in which, when one sender sends a message, it is received by all the others in a different domain.

None of the mentioned is true.

Steps of an instruction cycle is given below

Steps of an instruction cycle is given below

- A. Instruction fetch 1
- B. Data operation 4
- C. Instruction operation decoding 2
- D. Data store 5
- E. Operand fetch 3

Find the correct order of execution.

Select one:

- a. A, C, B, D, E
- b. B, A, C, D, E
- c. B, A, E, C, D
- d. D, C, A, B, E
- e. A, C, E, B, D

The instruction currently being executed is stored in

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Select one:

- a. Instruction register
- b. Instruction pointer
- c. Program counter
- d. Data register
- e. Accumulator

Select the incorrect statement

Select the incorrect statement

Select one:

- a. SPARC and Power PC are desktop computers that use RISC processors ✓
- b. In RISC processors, more emphasis is given to software
- c. RISC normally has low cycles per second, large code sizes
- d. In CISC, more transistors are used for storing complex instructions
- e. Compiler workload is low in RISC based machines

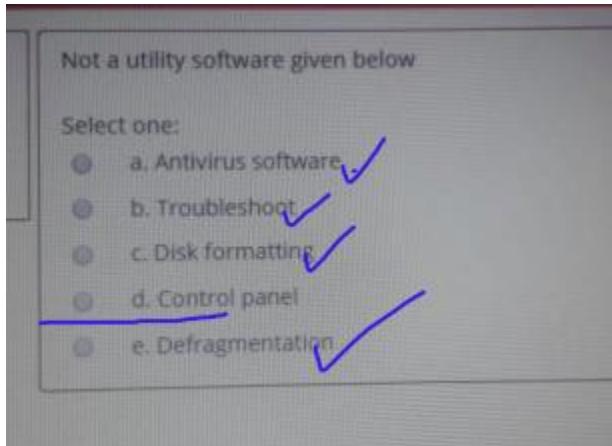
Which of the following are NOT real time application scenarios?

Which of the following are NOT real time application scenarios? (Select Two)

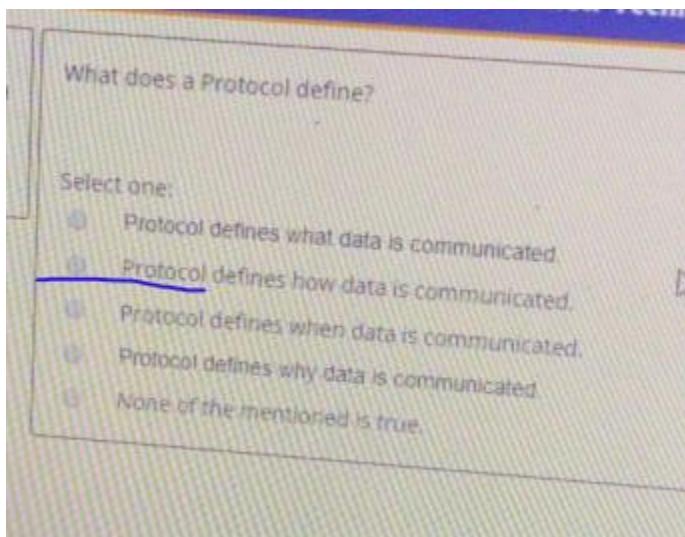
Select one or more:

- a. Skype Video Conference
- b. Zoom live webinar
- c. Facebook live video
- d. What's App Call
- e. Downloading a movie using a file sharing application
- f. Downloading an email attachment from an Email App

Not a utility software given below



What does a Protocol define



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Select the correct statement

Select the correct statement.

Select one:

- A private network is not directly connected to internet.
- If a network is directly connected to Internet, it will become a part of internet.
- In a private network, it is mandatory to follow internet standards.
- A private network is a set of interconnected intranets.
- None of the given answers are true.

Given below are the features of first generation computer systems. Which of the following isn't true

Given below are the features of first-generation computer systems. Which of the following isn't true

Select one:

- a. 1st generation computers used machine language ✓
- b. 1st generation computers had a well-developed OS system. ✗
- c. 1st generation computers were expensive to operate. ✓
- d. 1st generation computers used punch card system. ✓
- e. 1st generation computers used hard-wired programming. ✓

In a Topology there are cables connecting each device to all the other devices in a network

In a topology there are cables connecting each device to all the other devices in a network.

Select one:

- Mesh
- Star
- Bus
- Ring
- Tree

If $K = \text{gates} + F/F$; What is K

01m
If $K = \text{Gates} + F/F$; What is K

Select one:

- a. Sequential Circuit
- b. Flip - Flops
- c. Minterms
- d. Combinational Circuit
- e. None of the above

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If there are 5 inputs to decoder the number of outputs will be

If there are 5 inputs to a decoder the number of outputs will be.

Select one:

- a. Infinite
- b. 32
- c. 16
- d. 8
- e. 4

Which of the following is not an area of memory pointed by 8086 register

The screenshot shows a question from a software application. The question is: "Which of the following is not an area of memory pointed by 8086 register". Below the question, there is a list of five options, each preceded by a radio button:

- a. Code segment
- b. Data segment
- c. Instruct segment
- d. Stack segment
- e. Extra segment

The option "c. Instruct segment" has been underlined with a blue pen.

what is a main difference between a Switch and Bridge

The screenshot shows a question from a software application. The question is: "What is a main difference between a Switch and a Bridge?". Below the question, there is a list of five options, each preceded by a radio button. The first two options have a large blue 'X' mark next to them, indicating they are incorrect:

- There is no difference.
- A bridge is used to connect LANs whereas a switch is used to create a LAN
- Bridge is used to segment a LAN while Switch is used to interconnect different LANs.
- Bridge is a dumb device while switch is an intelligent device
- Switch is large and a bridge is small

A blue 'Next page' button is visible at the bottom right of the screen.

What does a Protocol define

What does a Protocol define?

Select one:

- Protocol defines what data is communicated.
- Protocol defines how data is communicated.
- Protocol defines when data is communicated.
- Protocol defines why data is communicated.
- None of the mentioned is true.

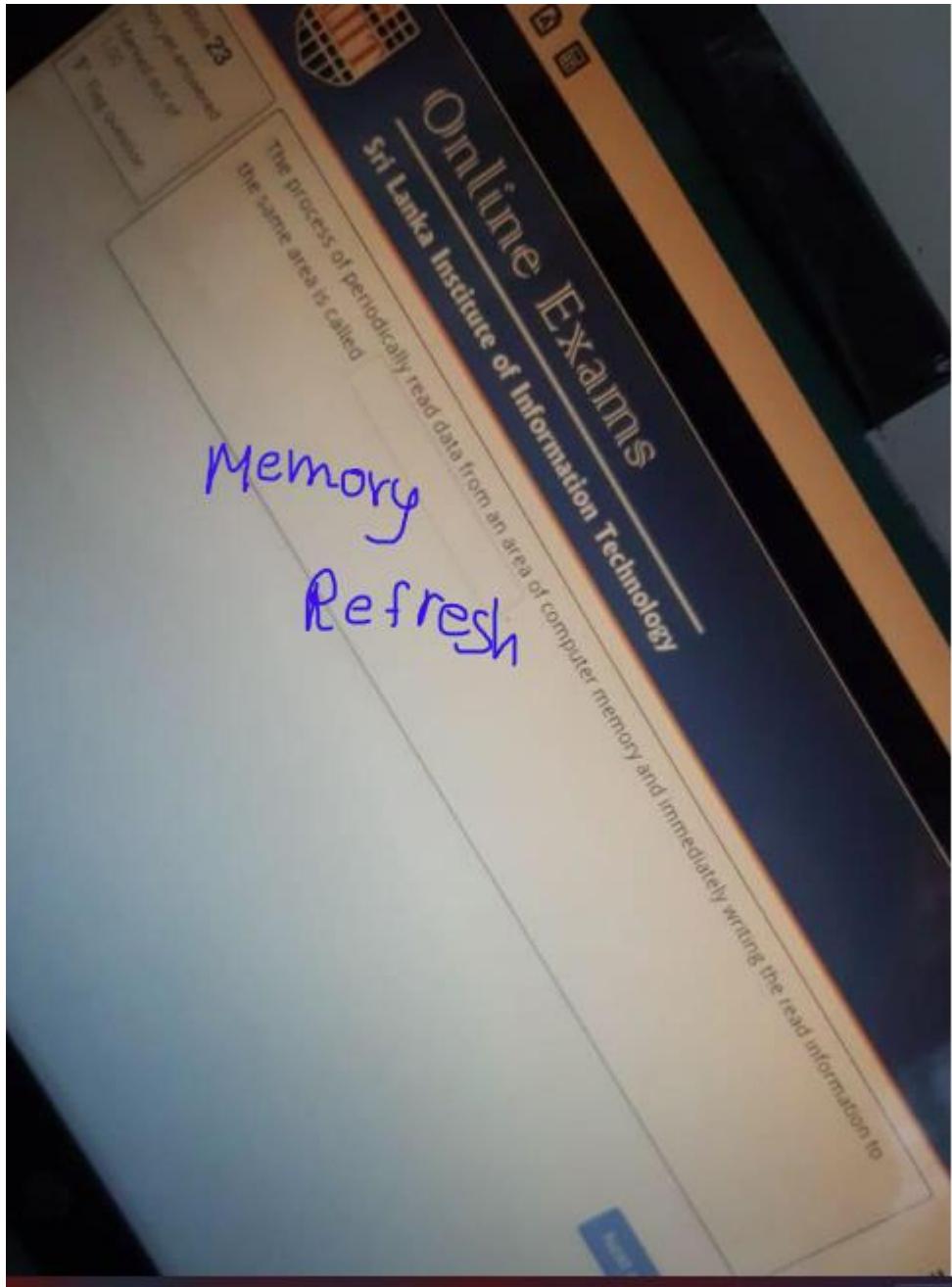
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The process of periodically read data from an area of computer memory and immediately writing the read information to the same area is called
.....



Complete the missing parts of the binary form of following IPv4 address: IPv4 address is 172. 128.10.138

21

answered
out of
question

Complete the missing parts of the binary form of following IPv4 address;

IPv4 Address: 172.128.10.138

- IPv4 Address in Binary:
- IP Address Class:

[Next page](#)

which of the following statements describe the network shown in the graphic?

Which of the following statements describe the network shown in the graphic? (Select two)

Select one or more:

- There are total number of two broadcast domains in the network.
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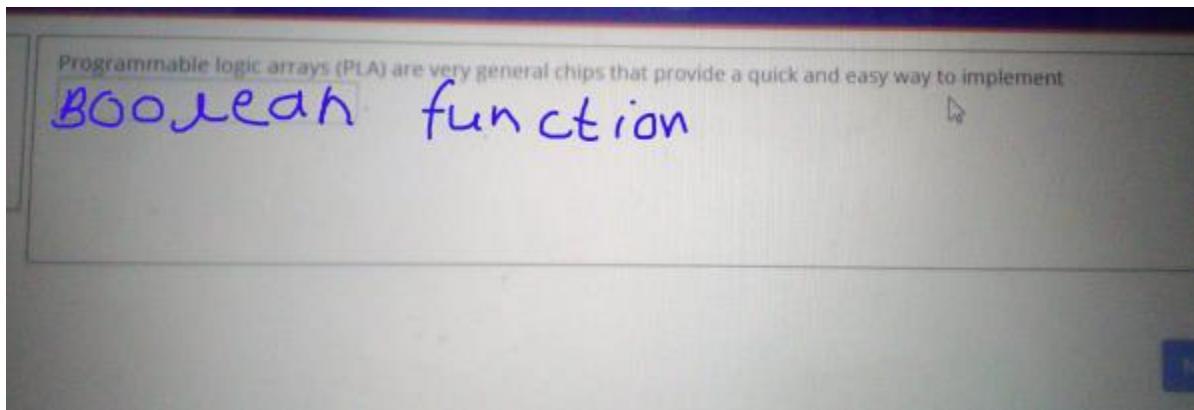
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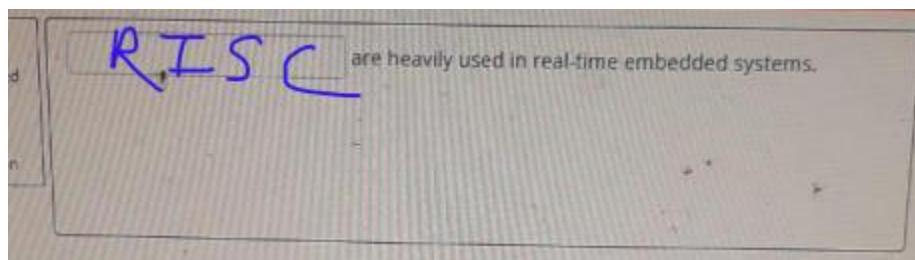
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Programmable logic arrays (PLA) are very general chips that provide a quick and easy way to implement



..... are heavily used in real-time embedded systems



Which of the following is NOT a correct statement regarding firewalls

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Select one:

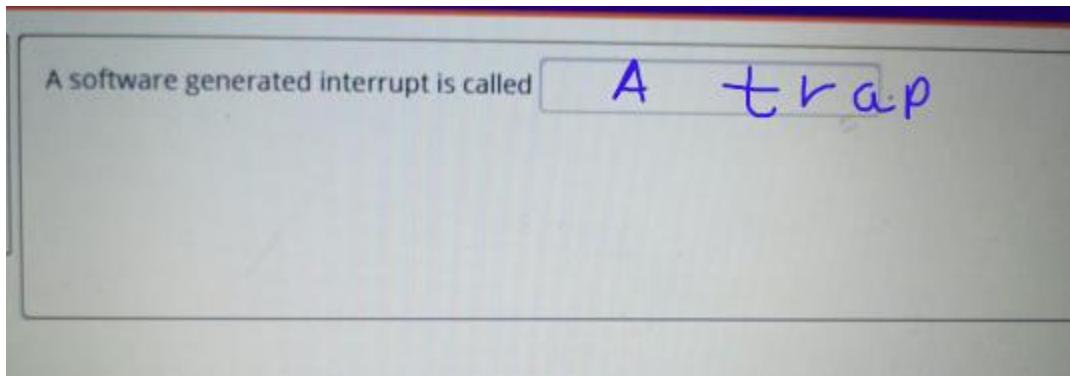
- a. A Firewall resides between two or more networks ✓
- b. A firewall controls traffic and helps prevent unauthorized access ✓
- c.
- d. Packet Filtering is a method used in Firewalls ↗
- e. URL Filtering is a method used in Firewalls ↗
- f. Firewall can provide 100% security to a network ↘

Packet Filtering is a method used in Firewalls ↗

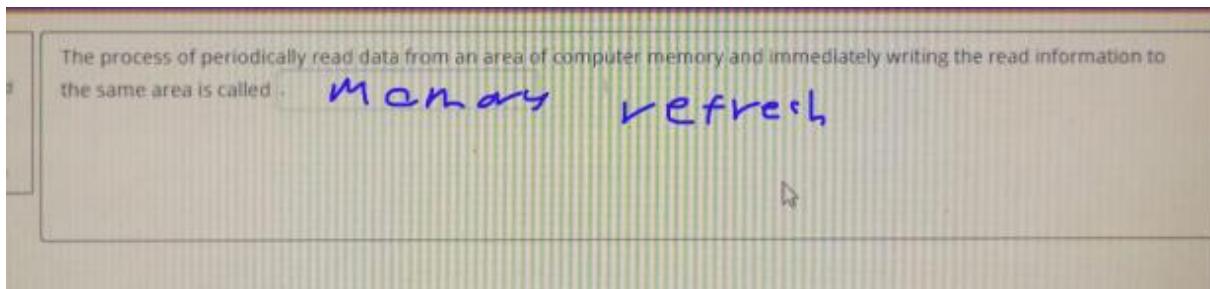
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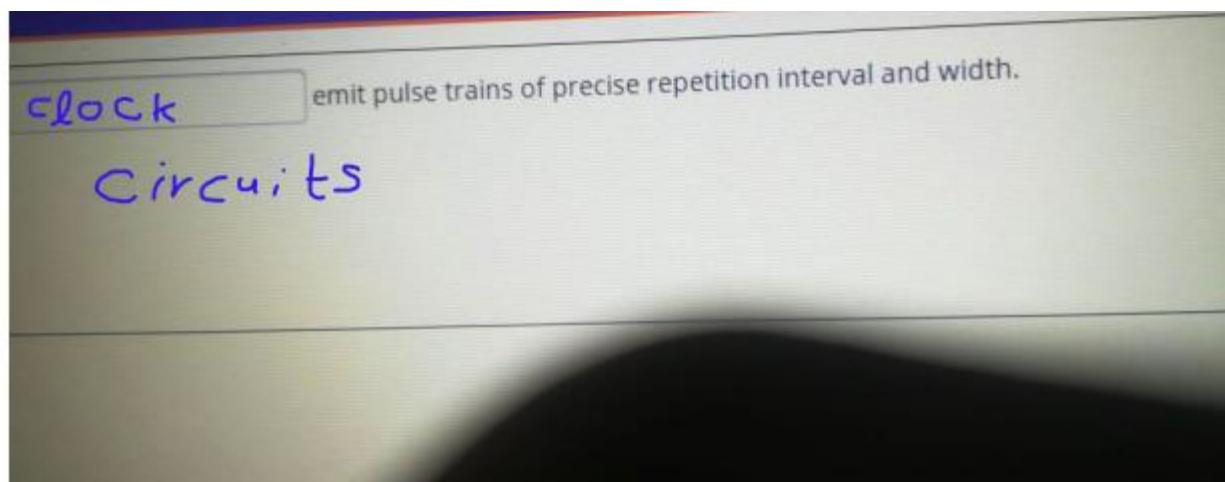
A software generated interrupt is called



The process of periodically reading data from an area of computer memory and immediately writing the read information to the same area is called



..... emit pulse trains of precise repetition interval and width



How many unique networks can be created in Class B

How many unique networks can be created in Class B?

Answer: $255 \times 254 \left(2^{16} - 2 \right)$

[Next page](#)

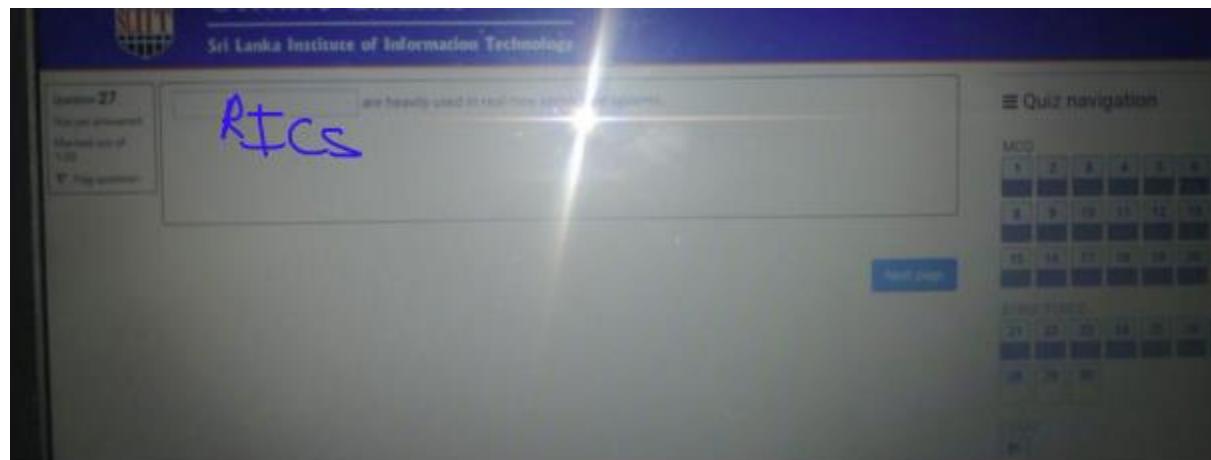
What are the correct statements about ' MAC address table' ?

What are the correct statements about "MAC address table"? (select two)

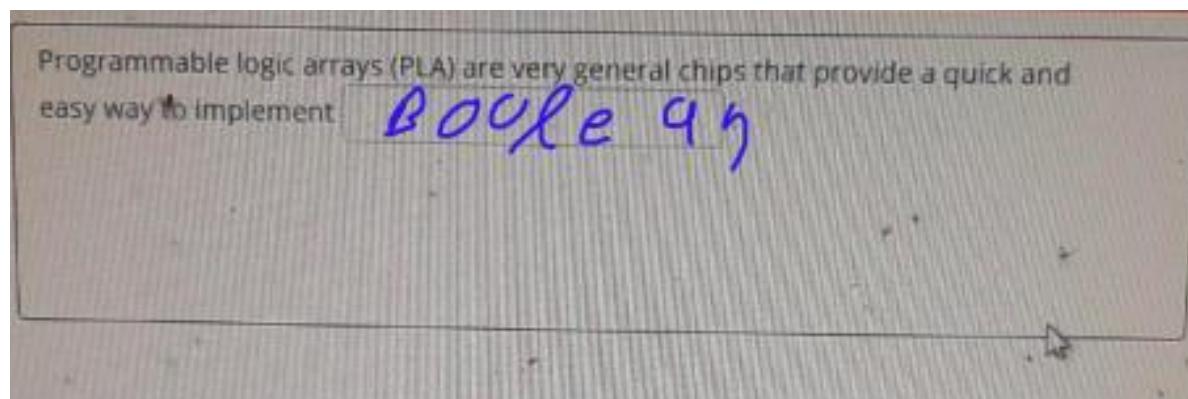
Select one or more:

- MAC address table is used by switches ✓
- MAC address table is used by routers ✓
- MAC address table is a collection of MAC addresses with the respective co✓
- MAC address table is created for each computer ✓
- None of the given answers are true

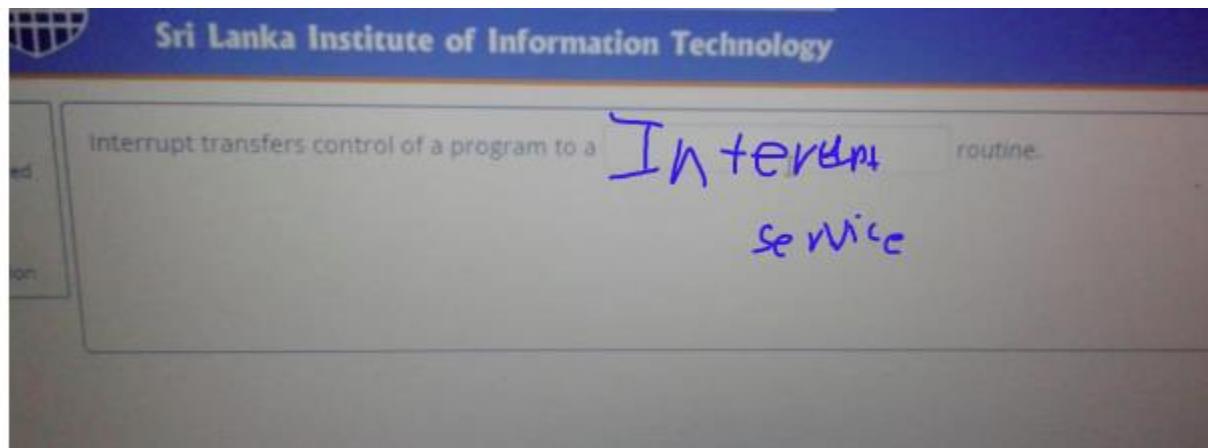
..... RICS



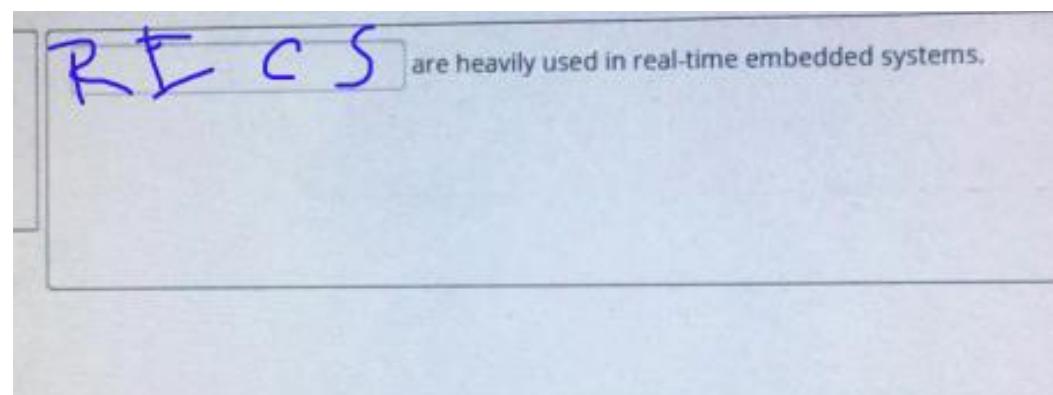
Programmable logic arrays (PLA) are very general chips that provide a quick and easy way to implement



Interrupt transfers control of a program to a routine



..... Are heavily used in real-time embedded systems



Select the incorrect statement regarding the Dynamic RAM

Select the incorrect statement regarding the Dynamic RAM

Select one:

- a. Bits stored as charges in capacitors
- b. No refreshing needed when powered
- c. Simpler construction, smaller per bit
- d. Slower than static memory
- e. Less expensive

Nimal and his team analyzed a real world problem to design a combinational circuit. They derived following truth table to record input (A, B, C) and output (f) behavior. They entered "X" in the output column where they don't care whether output is "0" or "1"

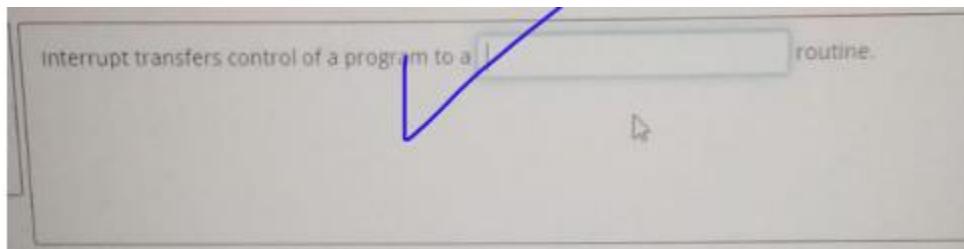
Nimal and his team analyzed a real-world problem to design a combinational circuit. They derived following truth table to record input (A, B, C, D) and output (f) behavior. They entered "X" in the output column where they don't care whether output is "0" or "1".

| A | B | C | D | f |
|---|---|---|---|---|
| 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 1 | 0 |
| 0 | 0 | 1 | 0 | 1 |
| 0 | 0 | 1 | 1 | 1 |
| 0 | 1 | 0 | 0 | 0 |
| 0 | 1 | 0 | 1 | X |
| 0 | 1 | 1 | 0 | 1 |
| 0 | 1 | 1 | 1 | X |

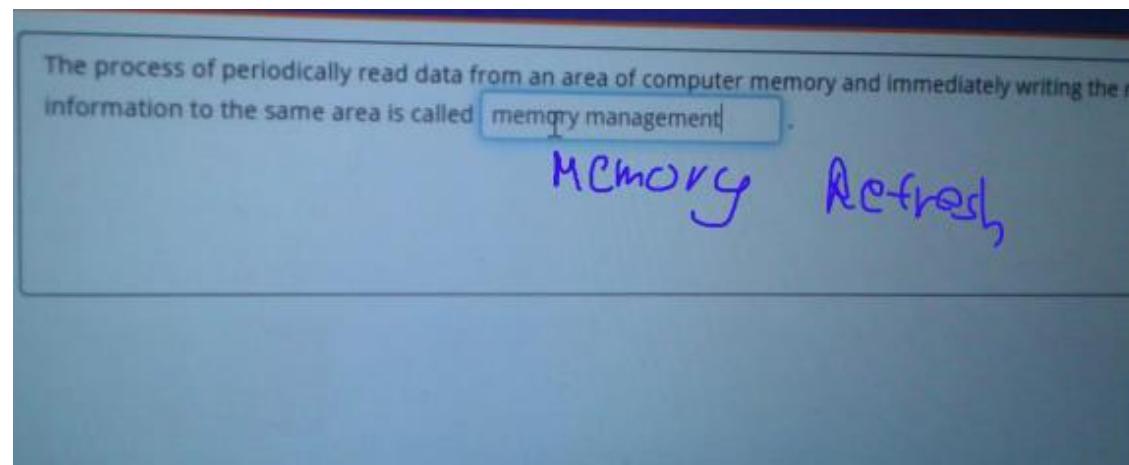
He needs your support to simplify output behavior function using a Karnaugh map (K-Map). Please write down the simplified Boolean function by using English letters A, B, C, D as variables. (write $\bar{A}B\bar{C}$ as $A'B'C'$, don't keep spaces between letters).

Answer: $A'C + CD$

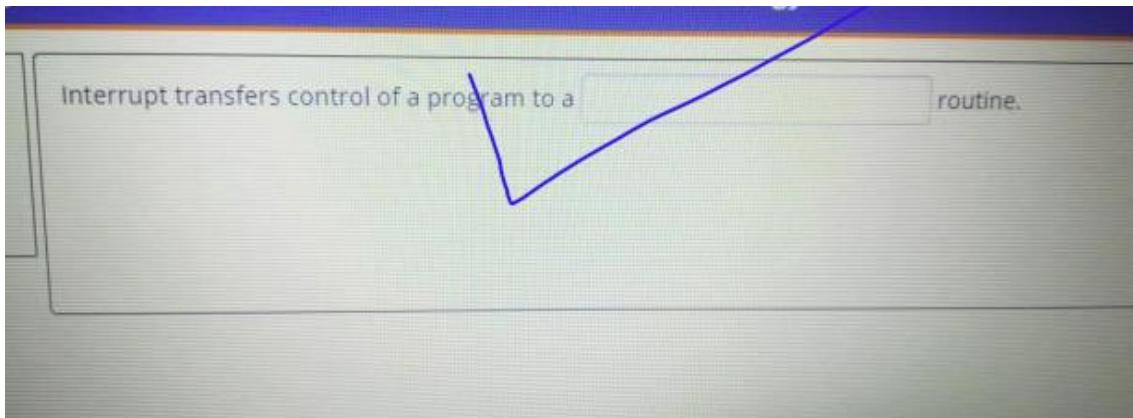
Interrupt transfers control of a program to a routine



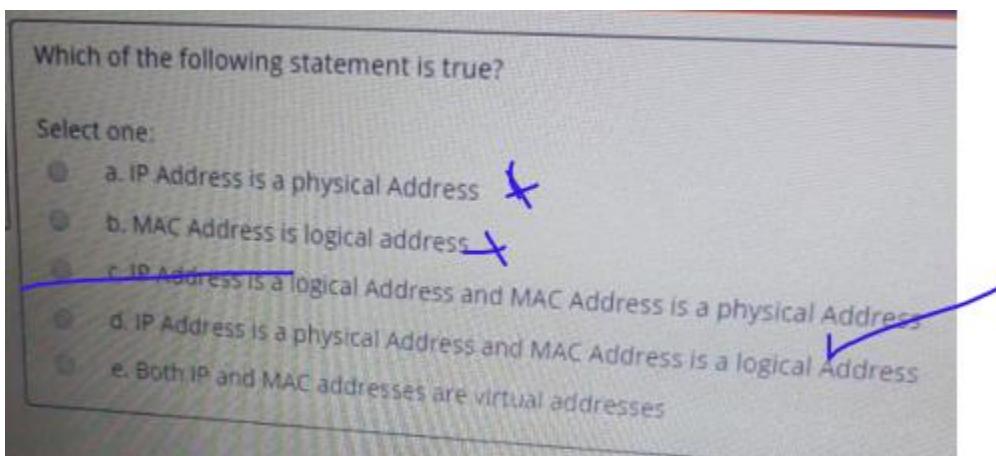
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..... information to the same area is called



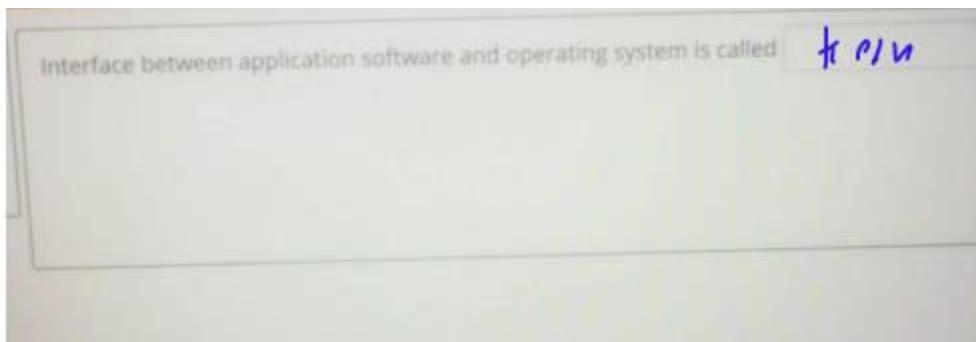
Interrupt transfers control of a program to a routine



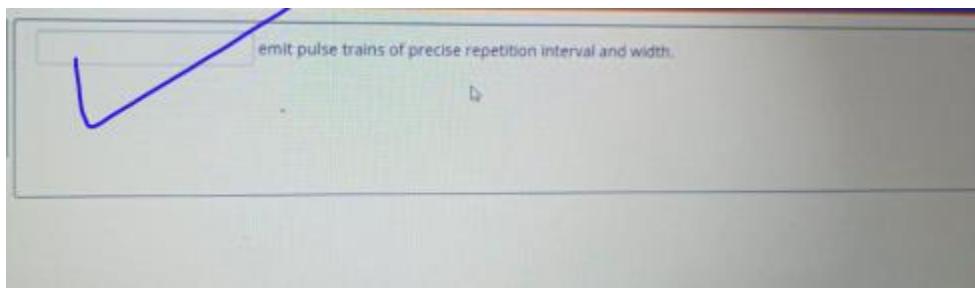
Which of the following statement is true



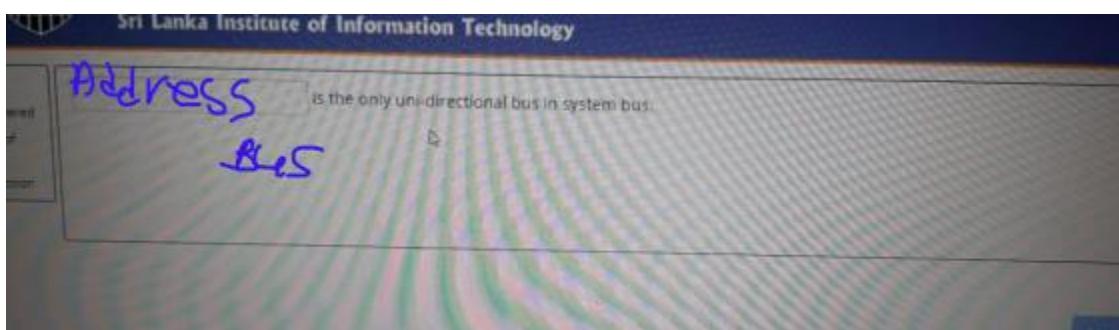
Interface between application software and operating system is called



..... Emit pulse trains of precise repetition interval and



..... is the only unidirectional bus in system bus



For the given IP address find the following

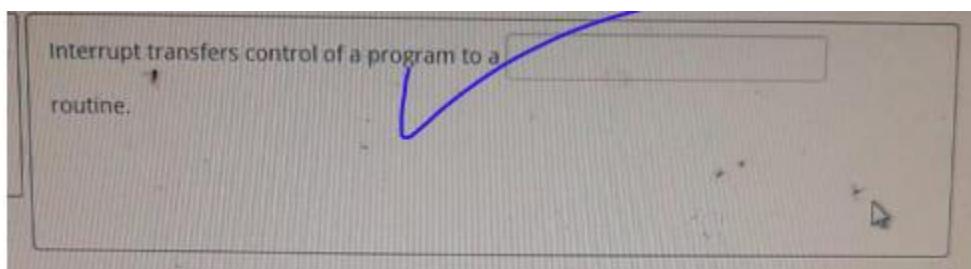
IP address : 172.18.10.1

The screenshot shows a question from an online exam. The header includes the SLIIT logo and the text "Online Exams" and "Sri Lanka Institute of Information Techno". The question is labeled "Question 21" and is described as "Not yet answered" with a mark of "5.00". A button "Flag question" is visible. The question text asks for the network address, subnet mask, broadcast address, and last usable IP address for the given IP address 172.18.10.1. Below the question are four input fields for the answers.

For the given IP address find the following
IP address: - 172.18.10.1

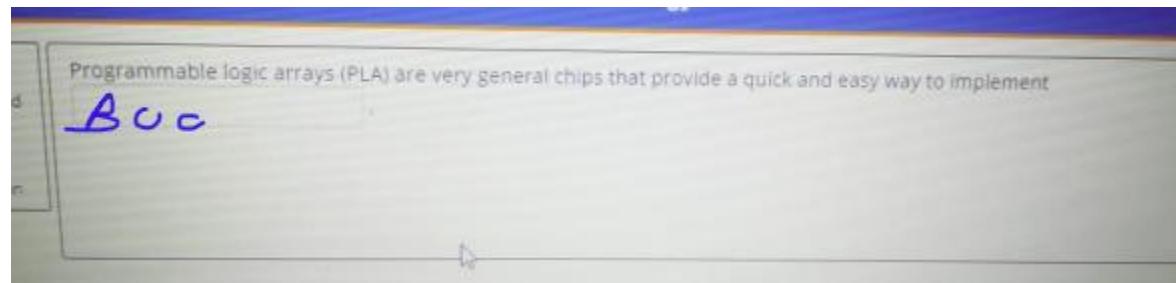
- Network address: . . .
- Subnet mask: . . .
- Broadcast address: . . .
- Last usable IP address: . . .

Interrupt transfers control of a program to a routine

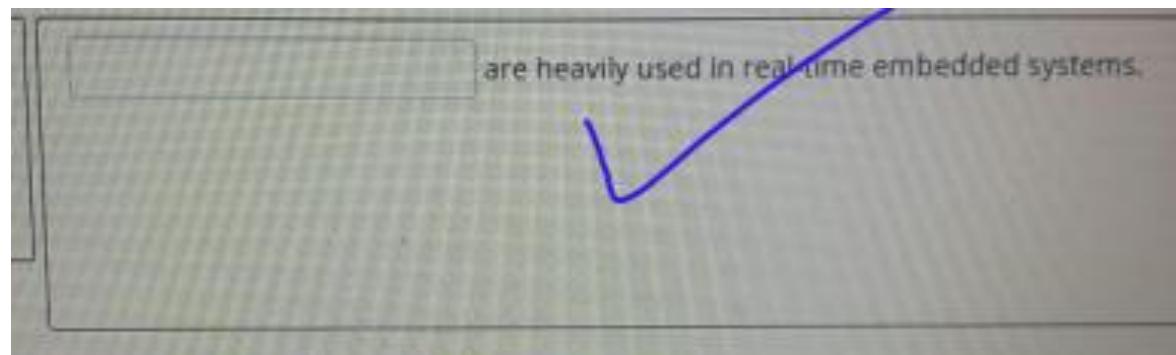


Programmable logic arrays (PLA) are very general chips that provide a quick and easy way to implement

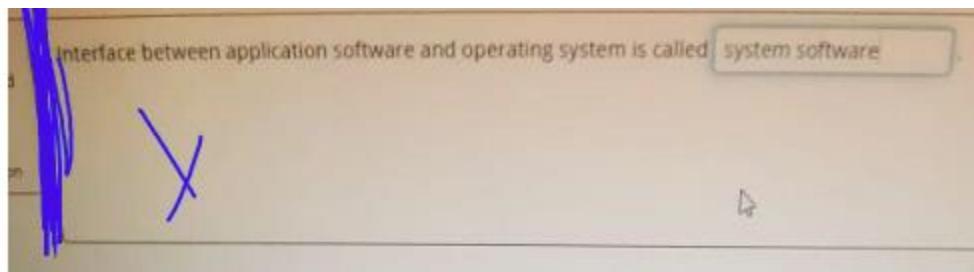
.....



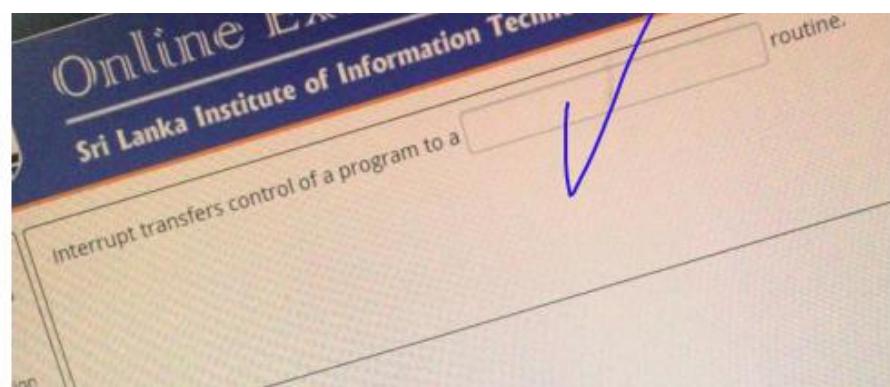
..... Are heavily used in real time embedded systems



Interface between application software and operating system is called



Interrupt transfers control of a program to a routine



What is not an operating system activity under the storage management

What is not an operating system activity under the storage management

Select one:

- a. Free-space management
- b. Storage allocation
- c. Disk scheduling
- d. Backup and reset
- e. None of above

What is the BCD value of 481

Institute of Information Technology

4
answered
out of
question

What is the BCD value of 481

Select one:

- a. 0001 1110 0001
- b. 0001 1110 0101
- c. 1111 0000 1
- d. 0001 1100 0001
- e. 1101 0000 1

select the incorrect statement regarding data

Select the incorrect statement regarding data

Select one:

- a. ASCII is an 7-bit code for 128 different characters.
- b. Data representation refers to the form in which data is stored, processed, and transmitted
- c. Digitization is the process of converting analog data into digital data.
- d. Numeric, alphabetic, special, alpha-numeric are different types of character data.
- e. One-bit parity is an error correction technique used in data storing and transmission.

select the incorrect statement regarding the Dynamic RAM

Select the incorrect statement regarding the Dynamic RAM

Select one:

- a. Bits stored as charges in capacitors
- b. No refreshing needed when powered
- c. Simpler construction, smaller per bit
- d. Slower than static memory
- e. Less expensive

Which of the following factors is not considered when selecting intermediate devices

Intermediate Devices of Information Technology

Which of the following factors is not considered when selecting intermediate devices?

Select one:

- a. Cost ✓
- b. Number of Ports ✓
- c. Device Speed ✓
- d. Manageability of the Device ✓
- e. Weight (portability) of the device

Match the description with the appropriate ISO-OSI Layer

Match the description with the appropriate ISO-OSI Layer.

| | |
|--|--|
| Allows users to access network resources | <input type="button" value="Choose..."/> |
| Translate, Encrypt & Compress Data | <input type="button" value="Choose..."/> |
| Provide reliable process to process message delivery | <input type="button" value="Choose..."/> |
| Organizes bits into frames which helps hop-to-hop delivery | <input type="button" value="Choose..."/> |

The dropdown menus show the following options:

- Choose...
- Application Layer
- Network Layer
- Presentation Layer
- Data Link Layer
- Transport Layer

Which of the following factors is not considered when selecting intermediate devices

Sri Lanka Institute of Information Technology

Which of the following factors is not considered when selecting intermediate devices?

Select one:

- a. Cost
- b. Number of Ports
- c. Device Speed
- d. Manageability of the Device
- e. Weight (portability) of the device

How many minterms in a 4 variable K- map

Sri Lanka Institute of Information Technology

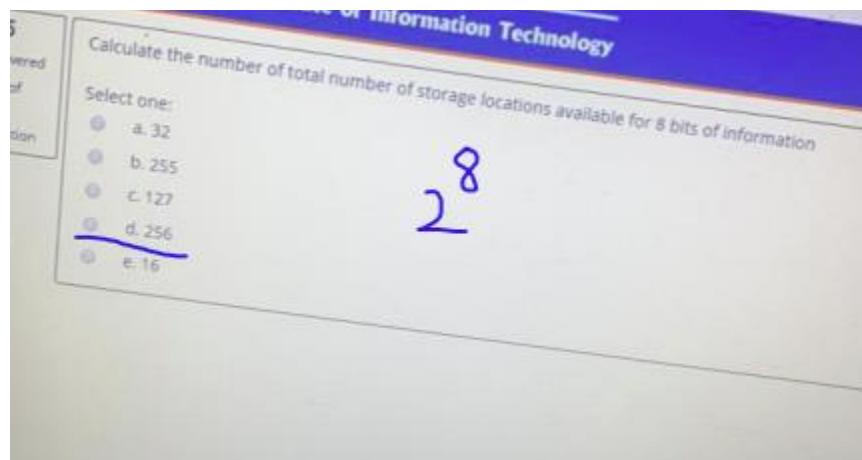
Question 12
12 questions answered
12 out of 12
question

How many minterms in a 4 Variable K-map

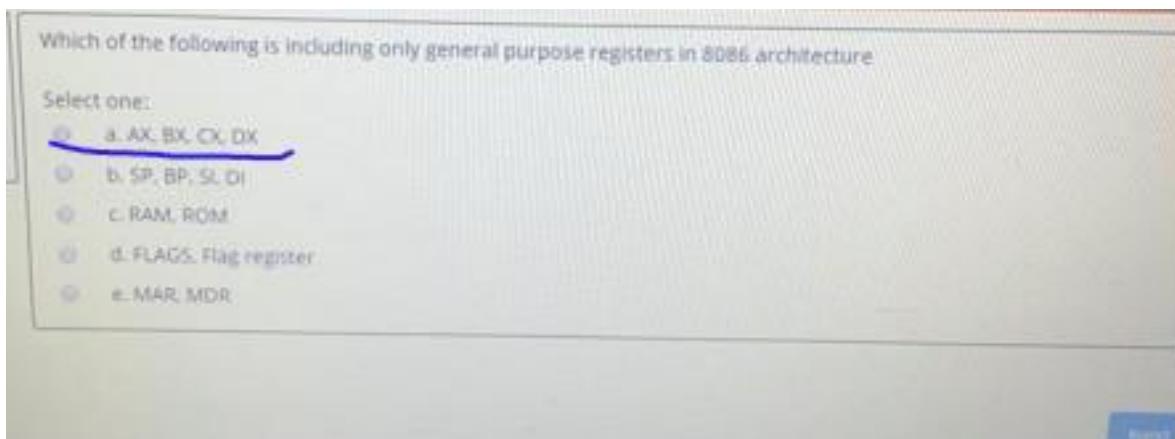
Select one:

- a. 12
- b. 16
- c. 8
- d. 4
- e. 64

Calculate the number of total number of storage locations available for 8 bits of information



Which of the following is included only general purpose registers in 8086 architecture



Mutability of storage devices explains

Mutability of storage devices explains

Select one:

- a. How storage locations are addressed
- b. What happens to the content when power is not available
- c. How storage locations are addresses
- d. Time latency due to seek time and rotational delay
- e. Weather the content is read/write or read only

What is the correct statement about a Collision Domain?

State of Information Technology

What is the correct statement about a Collision Domain?

Select one:

- A collection of two or more computers in which, if more than one sender tries to send data simultaneously, the signals will collide in the transmission media and make all the sent information unusable.
- In a router, all ports are in a single collision domain
- A collection of two or more computers in which, if one sender tries to send data, the signal will collide in the transmission media and make the sent information unusable.
- A collection of two or more computers in which, one computer tries to send data after another computer, the signals will collide in the transmission media and make all the sent information unusable.
- None of the mentioned is true

Next page

For the given IP address find the following

IP address : 192.168.12.8

For the given IP address find the following.

IP address: - 192.168.12.8

- Network address: . . .
- Subnet mask: . . .
- Broadcast address: 192 . 168 . 12 .
- 1st usable IP address: 192 . 168 . 12 .
- Last usable IP address: 192 . 168 . 12 .
- Number Hosts that can be connected to this network:

Change the following IP address from binary notation to dotted decimal and find the IPv4 address class .

Binary form= 10101100 00010001 11001001 00001010

Page 22
Date _____
Name _____
Section _____
Question _____

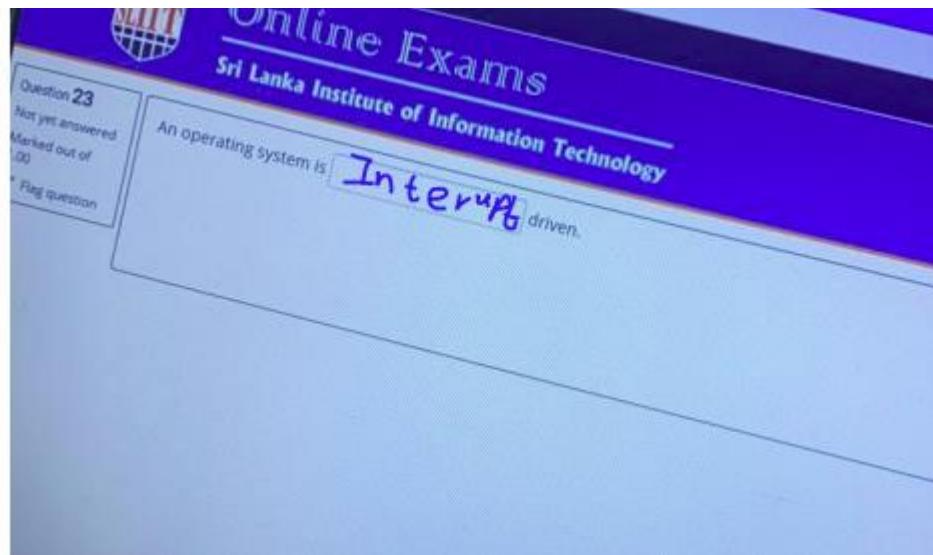
Course of Information Technology

Change the following IP address from binary notation to dotted decimal and find the IPv4 Address Class.
Binary Form = 10101100 00010001 11001001 00001010

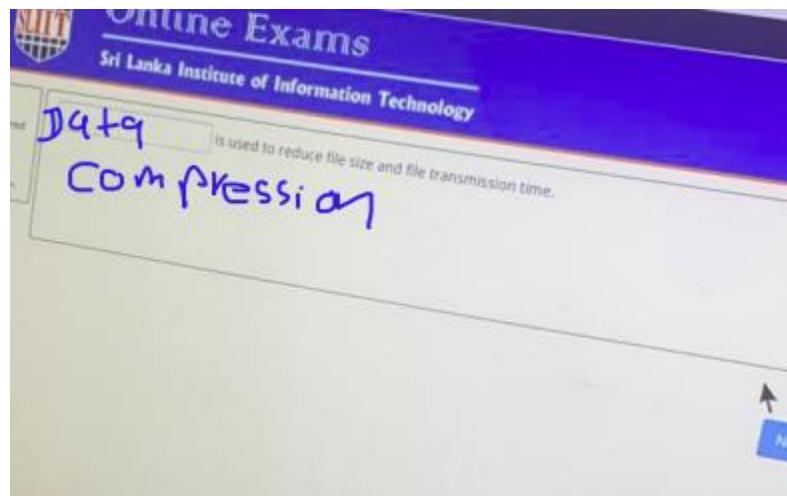
- IPv4 Address in Decimal: . . .
- IP Address Class:

Next page

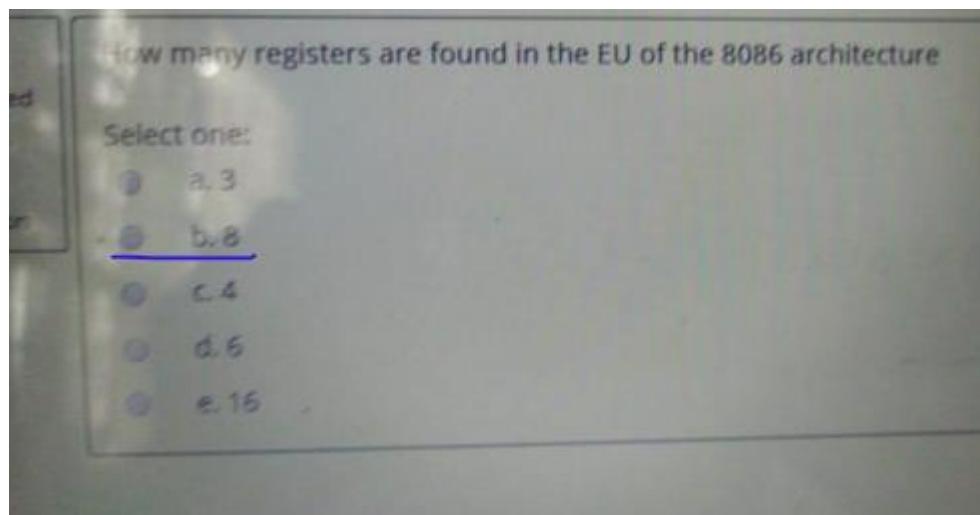
An operating system is driven



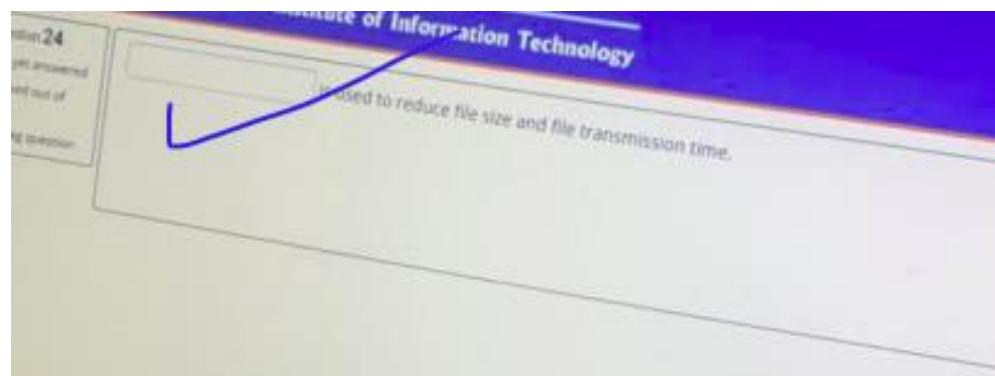
..... Is used to reduce file size and file transmission time



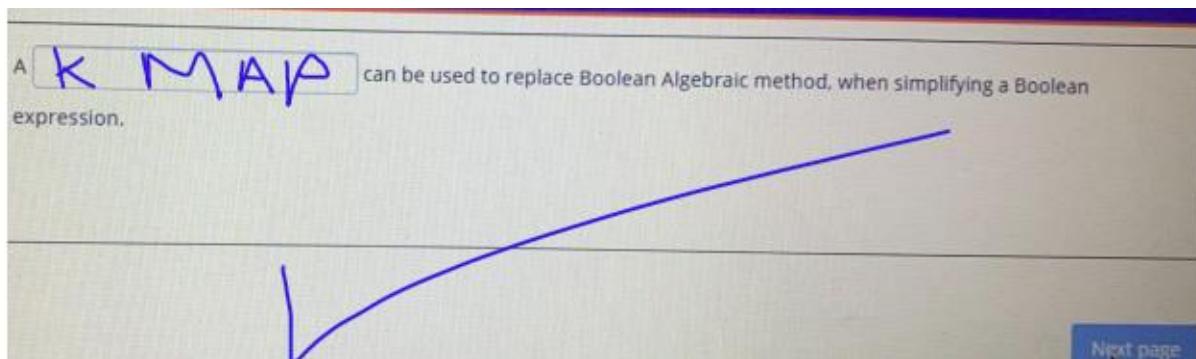
How many registers are found in the EU of the 8086 architecture



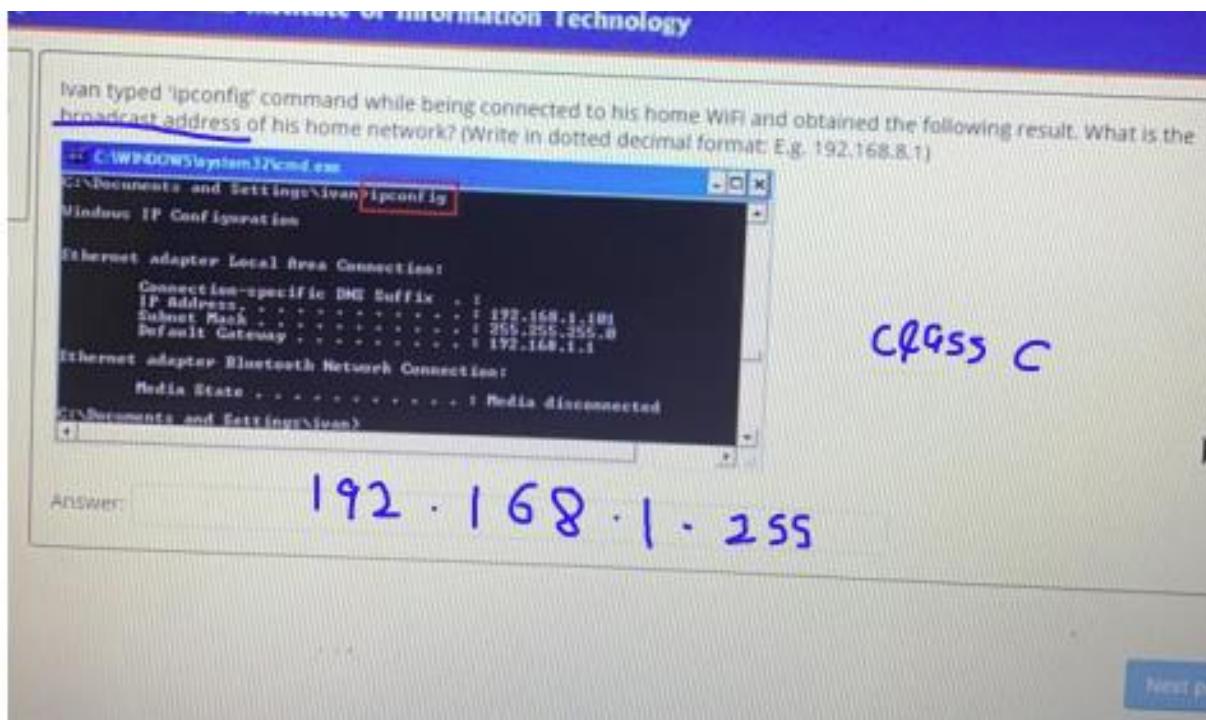
..... Is used to reduce the file size and file transmission time



A can be used to replace Boolean Algebraic method, when simplifying a Boolean expression



Ivan typed 'ipconfig' command while being connected to his home WiFi and obtained the following result. What is the broadcast address of his home network? (write in dotted decimal format: E.g. 192.168.8.1)



Steps of designing a digital circuit to solve a real world problem is given below.

Steps of designing a digital circuit to solve a real world problem is given below:

A. K-maps are used to simplify the equations 4

B. The truth table is developed 3

C. Implemented using logic gates 5

D. The problem is analyzed 1

E. Identify input variables and output variables 2

Find the correct order of execution.

Select one:

- a. A, C, B, D, E
- b. D, C, B, E, A
- c. B, D, E, C, A
- d. D, E, B, A, C
- e. A, C, E, B, D

Sunil analyzed a real-world problem to design

Sri Lanka Institute of Information Technology

Sunil analyzed a real-world problem to design a combinational circuit. He derived following equations by carefully going through the line numbers of truth table.

$$f = \sum(2, 3, 6, 15) \quad 2^4 = 16 //$$
$$\text{don't_care} = \sum(5, 7, 11)$$

He needs your support to simplify these equations using a Karnaugh map (K-Map). Please write down the simplified Boolean equation by using English letters A, B, C, D as variables. (write $\bar{A}B\bar{C}$ as $A'B'C'$, don't keep spaces between letters)

Answer: _____

Next page

ADSL is the abbreviation

ADSL is the abbreviation of.

Select one:

- Asymmetric Dual Subscriber Line
- Asymmetric Digital System Line
- Asymmetric Digital Subscriber Line
- Asymmetric Dual System Line
- None of the mentioned is true.

In the instruction ADD AX 20H

In the instruction ADD AX, 20H, the answer gets stored in AX

In the instruction ADD Ax 20H

In the instruction ADD AX, 20H, the answer gets stored in AX

5 4 4
A' d/v M4b S/H

Complete the missing parts of the binary

Complete the missing parts of the binary form of following IPv4 address:

IPv4 Address: 198.168.10.1

- IPv4 Address in Binary: **11000110 . 10101000 . 00001010 . 00000001**
- How Many Hosts Can be Connected this Network: $(2^8 - 2) = 254$

Can be used to replace Boolean algebraic

A **K-map** can be used to replace Boolean Algebraic method. when simplifying a Boolean expression.

Select the correct statement about dial up

Select the correct statements about Dial up connection. Select two

Select one or more:

- Provides low speed ✓
- Doesn't provide a continuous connection. Need to dial up to connect ✓
- Has a fixed monthly rental.
- Digital service.
- Each service is billed separately.

Select the most suitable statement

Select the most suitable statement.

Select one:

- Converged networks carry data, voice, video & images over the same network
- Converged networks carry social networking data
- Converged networks are LANs
- Converged networks are private networks
- None of the given statements are true

Select the correct statement about hubs

Select the correct statement about hubs.

Select one:

- Hub always broadcast messages
- Hub functions are similar to switch
- Hub always unicast messages
- Hub maintains a MAC table for data forwarding
- None of the given statements are true

How to reduce file size and transmission times

How to reduce file size and transmission times of digital data

Select one:

- a. Zipping
- b. Extracting
- c. Unzipping
- d. Compress
- e. Hiding

Select the correct statements about network characteristics

Select the correct statements about network characteristics. (Select two)

Select one or more:

- The data rate is measured by bits per second of a given link in the network. ✓
- Scalability indicates how many nodes are currently on the network. ✓
- The logical topology is the arrangement of cables, network devices, and end systems X
- Availability is a measure of the probability that the network will be available for use when needed.
- Reliability indicates the non-dependability of the components that make up the network. X

Select the answer which explains how SI and DI are used respectively

select the answer which explains how SI and DI are used respectively

Select one:

- a. Used for multiplying and dividing, used as an address register
- b. Used with extended addressing commands, used in some addressing modes
- c. Used as an addressing register, used for multiplying and dividing
- d. Used in some addressing modes, used with extended addressing commands
- e. Used for arithmetic operation, used with extended addressing commands

What is the process of converting information, such as text numbers, photo or music

What is the process of converting information, such as text, numbers, photo or music into digital data manipulated by electronic vise

Select one:

- a. Digitalization
- b. Transmission
- c. Electronic circuits
- d. Digital revolution
- e. Data compression

Select the most suitable statement

Select the most suitable statement.

Select one:

- Converged networks carry data, voice, video & images over the same network.
- Converged networks carry social networking data.
- Converged networks are LANs.
- Converged networks are private networks.
- None of the given statements are true.

What is the size of data bus and address bus in 8086

What is the size of data bus and address bus in 8086 microprocessor respectively

Select one:

- a. 8 bit/ 16 bit
- b. 32 bit/ 32 bit
- c. 16 bit/ 8 bit
- d. 16 bit/ 32 bit
- e. 8 bit/ 64 bit

Mutability of storage devices explains

Mutability of storage devices explains

Select one:

- a. How storage locations are addressed
- b. What happens to the content when power is not available
- c. How storage locations are addresses
- d. Time latency due to seek time and rotational delay
- e. Weather the content is read/write or read only

A logic gate can have

A logic gate can have

Select one:

- a. A single input and a single output ✓
- b. Many inputs and many outputs ✗
- c. Many inputs and a single output
- d. Single input and many outputs ✗
- e. None of the above

Select the correct statement about hubs

Select the correct statement about hubs.

Select one:

- Hub always broadcast messages
- Hub functions are similar to switch.
- Hub always unicast messages.
- Hub maintains a MAC table for data forwarding
- None of the given statements are true.

What service of an operating system is related with allocating and deallocating

What service of an operating system is related with allocating and deallocating memory space as needed

Select one:

- a. Protection and security
- b. Storage management
- c. Process management
- d. File management
- e. Memory management

John typed ipconfig command while being connected to his home wifi

john typed 'ipconfig' command while being connected to his home WiFi and obtained the following result. How many IPv4 computers/devices can be connected to John's home network?

```
Wireless LAN adapter Wi-Fi:
Connection-specific DNS Suffix . . . . . : 
IPv6 Address . . . . . : 2402:4000:2080:76c8:74a5:2827:c1c8:4
IPv6 Address . . . . . : 2402:4000:2182:5b3f:5095:efffe:edbc:5f63
IPv6 Address . . . . . : 2402:4000:2182:5b3f:74a5:2827:c1c8:4
Temporary IPv6 Address . . . . . : 2402:4000:2182:5b3f:a4e4:9e4c:8590:cba
Link-local IPv6 Address . . . . . : fe80::5095:efffe:edbc:5f63%4
IPv4 Address . . . . . : 192.168.8.186
Subnet Mask . . . . . : 255.255.255.0
Default Gateway . . . . . : fe80::76a5:28ff:fe27:c1c8%4
192.168.8.1
```

(2⁸-2)-

What is the example of first generation computer

What is the example of first generation computer

Select one:

- a. UNIVAC
- b. STAR 1000
- c. IBM 4341
- d. DEC 10
- e. PDP 1

Select the incorrect statement

Select the incorrect statement

Select one:

- a. SPARC and Power PC are desktop computers that use RISC processors
- b. In RISC processors, more emphasis is given to software
- c. RISC normally has low cycles per second, large code sizes
- d. In CISC, more transistors are used for storing complex instructions
- e. Compiler workload is low in RISC based machines

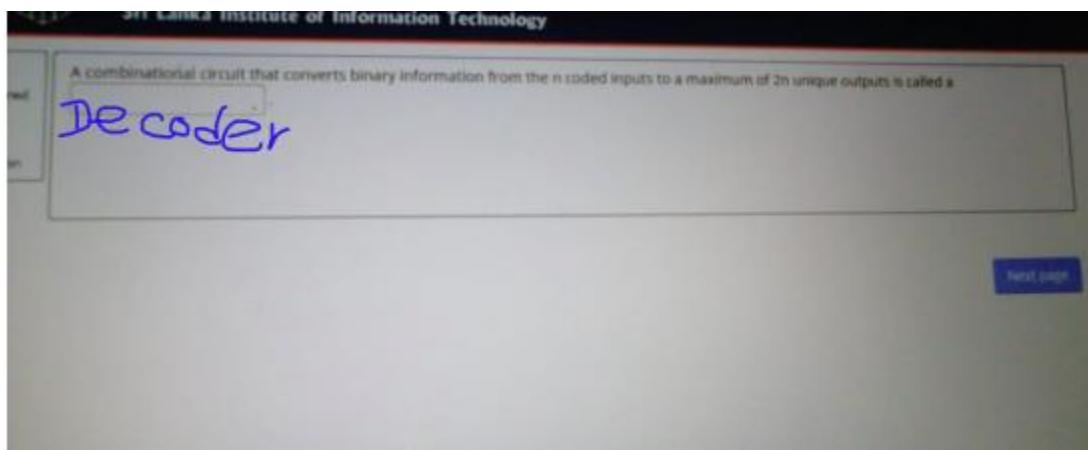
Copper cables are one of the most popular wired transmission

Copper cables are one of the most popular wired transmission medium because,

Select one:

- a. It uses differential signaling for signal transmission.
- b. It is less costly in maintenance and installation.
- c. It is the only guided medium available.
- d. Copper cables can bend in any direction.
- e. There are multiple number of cables.

A combinational circuit that converts binary information from the n coded inputs



What instructions can only executable in kernel

What instructions can only be executed in kernel mode

Select one:

- a. Program
- b. Instructions designated as privileged
- c. Firmware
- d. Operating system
- e. None of the above

General purpose register are built with

General Purpose registers are built with micro Processor

\

Which of the following statement is incorrect regarding the internet

Which of the following statement is incorrect regarding the 'Internet'?

Select one:

- a. Internet is a collection of interconnected networks
- b. Internet is the largest WAN topology
- c. Internet protocols are managed by IETF
- d. Internet is governed by International Standardization Organization (ISO)

What is the correct statement about a collision

What is the correct statement about a Collision Domain?

Select one:

- A collection of two or more computers in which, if more than one sender tries to send data simultaneously, the signals will collide in the transmission media and make all the sent information unusable.
- In a router, all ports are in a single collision domain
- A collection of two or more computers in which, if one sender tries to send data, the signal will collide in the transmission media and make the sent information unusable.
- A collection of two or more computers in which, one computer tries to send data after another computer, the signals will collide in the transmission media and make all the sent information unusable.
- None of the mentioned is true

Is an electronic circuit having a combinational

Seq Cir

Is an electronic circuit having a combinational circuit with a memory.

John typed ipconfig command while being connected

John typed 'ipconfig' command while being connected to his home WiFi and obtained the following result. How many IPv4 computers/devices can be connected to John's home network?

```
IPv4 Address . . . . . : 172.20.2.1 (Preferred)
Subnet Mask . . . . . : 255.255.0.0
Default Gateway . . . . . : 2001:428:ed3d:1000::1
                           fe80::2e8:4cff:fe68:43d0%3
                           172.20.0.1
DHCPv6 IAID . . . . . : 64578958
DHCPv6 Client DUID . . . . . : 00-01-00-01-1E-88-A9-CE-9C-5C-8E-8F-2F-BB
DNS Servers . . . . . : 2001:428:ed3d:1000::11
                           2001:428:ed3d:1000::12
                           172.20.0.11
                           172.20.0.12
NetBIOS over Tcpip. . . . . : Enabled
Connection-specific DNS Suffix Search List :
                               hundreddays.com

Answer:  $(2^{16} - 2) = 65534$ 
```

Complete the missing parts of the binary

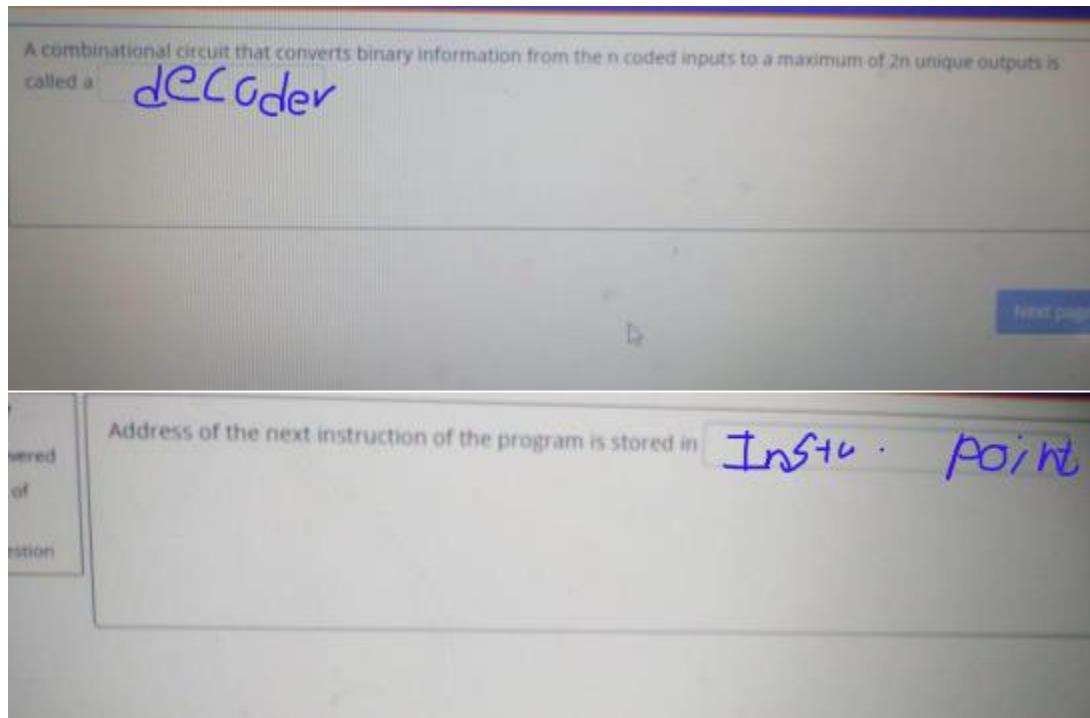
Complete the missing parts of the binary form of following IPv4 address:

IPv4 Address: 224.179.11.4

- IPv4 Address in Binary: . . .
- How Many Hosts Can be Connected this Network:

A combinational circuit that converts binary information from

Address of the next instruction of the program is



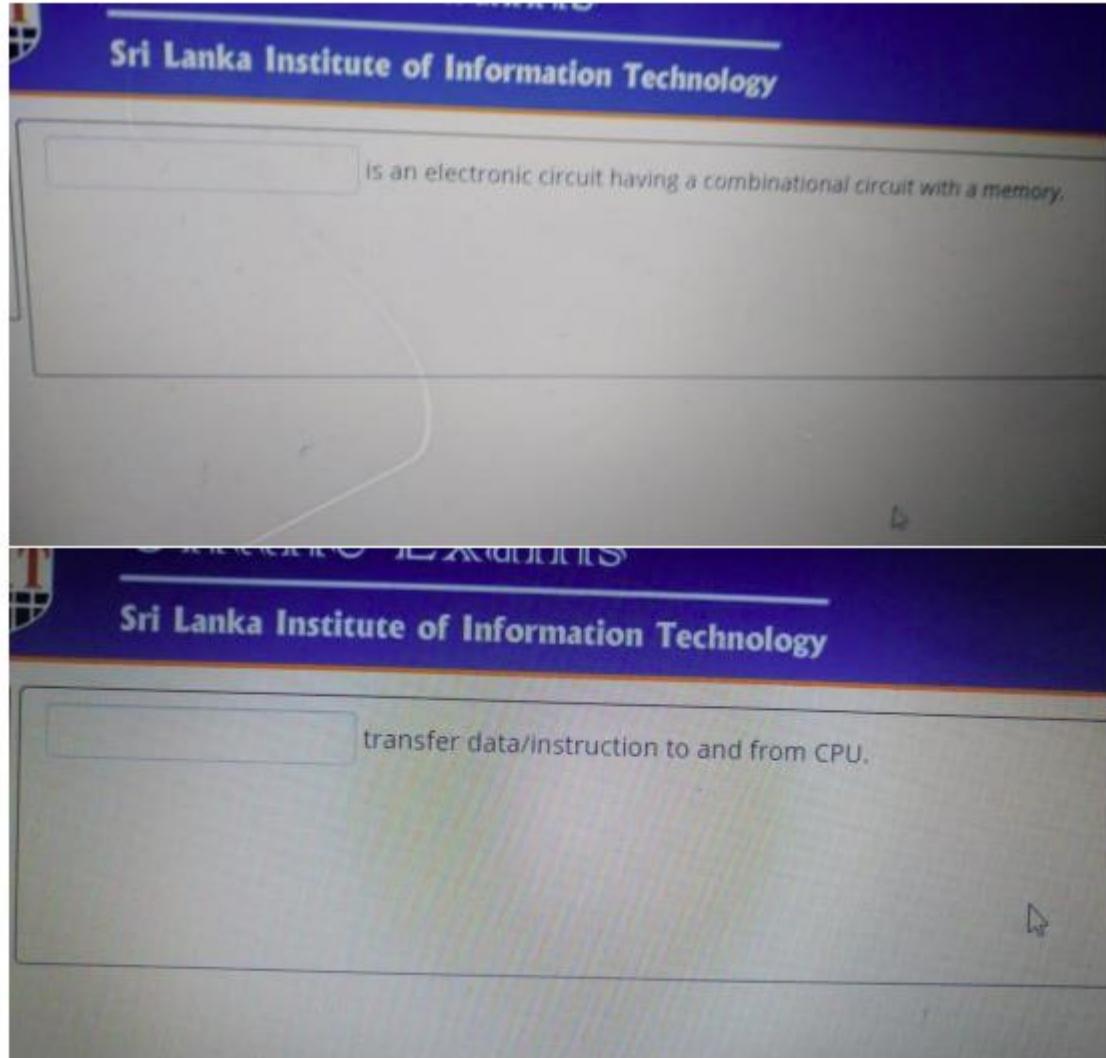
A semiconductor memory cell is fabricated with

The difference between memory and storage is that the memory

A screenshot of a computer screen displaying an online exam interface. The top portion shows a question: "A semiconductor memory cell is fabricated with" followed by a text input field containing handwritten blue ink that reads "transistors //". Below this, the header "Online Exams" and "Sri Lanka Institute of Information Technology" is visible. The main content area contains another question: "The difference between memory and storage is that the memory is" followed by a text input field, and "and storage is permanent." followed by another text input field. At the bottom right of the content area is a blue button labeled "next page".

Is an electronic circuit having a combinational circuit with a memory

Transfer data instruction to and from cpu



Is loaded to main memory at the end of bootstrapping

A semiconductor memory cell is fabricated with

The image shows two screenshots of an online examination system. Both screenshots feature a dark blue header with the SLIIT logo and the text "Online Exams" and "Sri Lanka Institute of Information Technology".
The top screenshot displays a question box containing the text: "is loaded to main memory at the end of Bootstrapping process."
The bottom screenshot shows a question box with the text: "A semiconductor memory cell is fabricated with".
In the bottom-left corner of the bottom screenshot, there is a status bar with the text: "Question 30", "Not answered", and "0 out of".

What is the meaning of broadcasting in networking

What is the meaning of "Broadcasting" in Networking?

Select one:

- Addressing a packet to all except a particular machine.
- Addressing a packet to a particular machine.
- Addressing a packet to all machines.
- Addressing a packet to group of machines.
- None of the mentioned is correct.

What is the subnet mask of the following IP address

29
Not yet answered
Marked out of
3.00
Flag question

What is the subnet mask of the following IP address?
IP address: - 192.168.105.4
Write your answer in dotted decimal format (e.g. 192.168.10.†)

Answer: **255.255.255.0**

Complete the missing parts of the binary form of following IPv4 address

IPv4 address : 174.16.10.134

Question 30
Not yet answered
Marked out of
3.00
Flag question

Complete the missing parts of the binary form of following IPv4 address:
IPv4 Address: 174.16.10.134

- IPv4 Address in Binary: **10101110.00010000, 00001010 . 10000110**
- IP Address Class: **B**

Change the following IP address from binary notation to dotted decimal and find the IPv4 Address Class

Change the following IP address from binary notation to dotted decimal and find the IPv4 Address Class.

Binary Form = 11000000 10101011 00001011 11001010

- IPv4 Address in Decimal: 192. 171. 11. 202
- IP Address Class: C

For the given IP address find the following

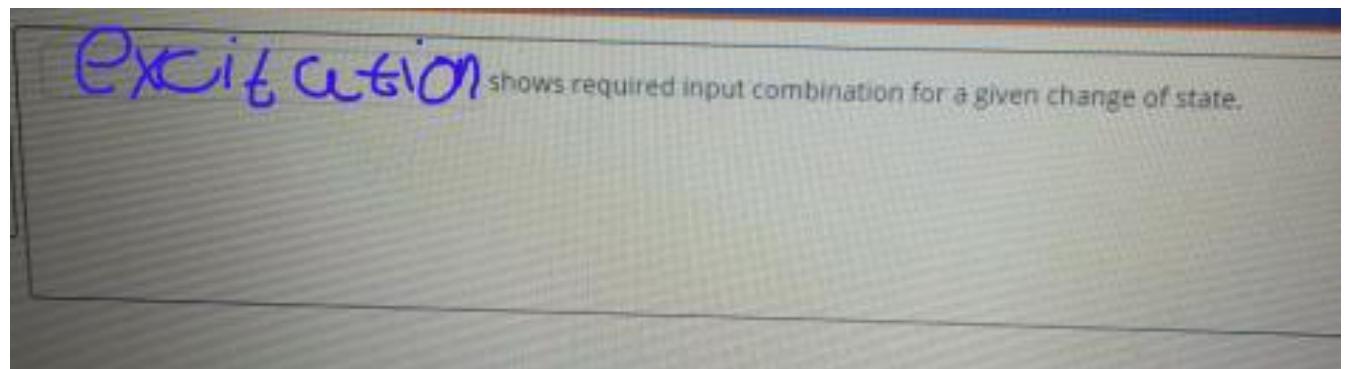
IP address : 192. 168.75.2

For the given IP address find the following.

IP address: - 192.168.75.2

- Network address: 192. 168. 75. 0
- Subnet mask: 255.255.255.0
- Broadcast address: 192 . 168 . 75 . 255
- 1st usable IP address: 192 . 168 . 75 . 1
- Last usable IP address: 192 . 168 . 75 . 254
- Number Hosts that can be connected to this network
254

..... shows required input combination for a given change of state



Which of the following statement is true?

Which of the following statement is true?

Select one:

- a. IP Address is a physical Address X
- b. Both IP and MAC addresses are virtual addresses X
- c. IP Address is a logical Address and MAC Address is a physical Address ✓
- d. IP Address is a physical Address and MAC Address is a logical Address X
- e. MAC Address is logical address X

Match the correct threat type to the given scenario

Match the correct threat type to the given scenario.

A Denial of Service Attack (DoS) using ping command

A Malware program attached to another program to execute a particular unwanted function on a workstation

Lots of rain causing floods and damaging the data center

Choose... Choose... Network Security Threat Physical Security Threat Application Security Threat

Sunil analyzed a real world problem to design a combinational circuit. He derived following equations by carefully going through the line numbers of truth table

Online Exams
Sri Lanka Institute of Information Technology

Question 31
1 point awarded
Marked out of 1.00
Flag question

Sunil analyzed a real-world problem to design a combinational circuit. He derived following equations by carefully going through the line numbers of truth table.

(Q) $f = \sum(9,12,14,15)$ $f(x) = []$

don't care = $\sum(4,11,13)$

He needs your support to simplify these equations using a Karnaugh map (K Map). Please write down the simplified Boolean equation by using English letters A, B, C, D - selected (write ABC' as $A'BC'$, don't keep spaces between letters)

Answer: AD + AB

4 4, 3

AD + AB

Time: 01:39:11.40

Which of the following statements design the network shown in the graphic?

Which of the following statements can be the network shown in the graphic? (Select two)

Select one or more:

- There are total number of eight collision domains in the network.
- There are total number of four collision domains in the network.
- There are total number of four broadcast domains in the network.
- There are total number of two broadcast domains in the network.
- There are total number of six broadcast domains in the network.
- There are total number of seven collision domains in the network.

Development of software for computers was started in

Development of software for computers was started in

Select one:

- a. 4th Generation
- b. 2nd Generation
- c. 1st Generation
- d. 5th Generation
- e. 3rd Generation

Select the correct statement

Select the correct statement.

Select one:

- A private network is a set of interconnected intranets.
- A private network is not directly connected to Internet X
- If a network is directly connected to Internet, it will become a part of Internet.
- None of the given answers are true.
- In a private network, it is mandatory to follow Internet standards

What is the service that usually an OS doesn't execute

What is the service that usually an OS doesn't execute

Select one:

- a. Security management ✓
- b. Firmware management
- c. Storage management ✓
- d. Process management ✓
- e. File system management

Which of the following statement describe the network shown in the graphic

Question
Not yet
Marked
1.00
Flag question

Which of the following statements describe the network shown in the graphic? (Select two)

Select one or more:

- There are total number of four broadcast domains in the network.
- There are total number of four collision domains in the network.
- There are total number of eight collision domains in the network.
- There are total number of two broadcast domains in the network.
- There are total number of three broadcast domains in the network.
- There are total number of seven collision domains in the network.

Sunil analyzed a real world problem to design a combinational circuit. He derived following equations by carefully going through the line numbers of truth table

Sunil analyzed a real-world problem to design a combinational circuit. He derived following equations by carefully going through the line numbers of truth table.

$$f = \sum (2, 3, 6, 15)$$
$$\text{don't_care} = \sum (5, 7, 11)$$

He needs your support to simplify these equations using a Karnaugh map (K-Map). Please write down the simplified Boolean equation by using English letters A, B, C, D as variables. (write $\bar{A}B\bar{C}$ as $A'BC'$, don't keep spaces between letters)

Answer: $A'C + CD //$

Next lesson

Steps of designing a digital circuit to solve a real world problem is given below

Steps of designing a digital circuit to solve a real world problem is given below:

- K-maps are used to simplify the equations
- The truth table is developed
- implemented using logic gates
- The problem is analyzed
- identify input variables and output variables

Find the correct order of execution.

Select one:

- A. A, C, B, D, E
- B. D, B, D, E, C, A
- C. A, C, E, B, D
- D. D, E, B, A, C
- E. D, C, B, E, A

How many characters have include in Unicode

How many characters have included in Unicode

Select one:

- a. 1 million
- b. 128
- c. 16
- d. 65536
- e. 256

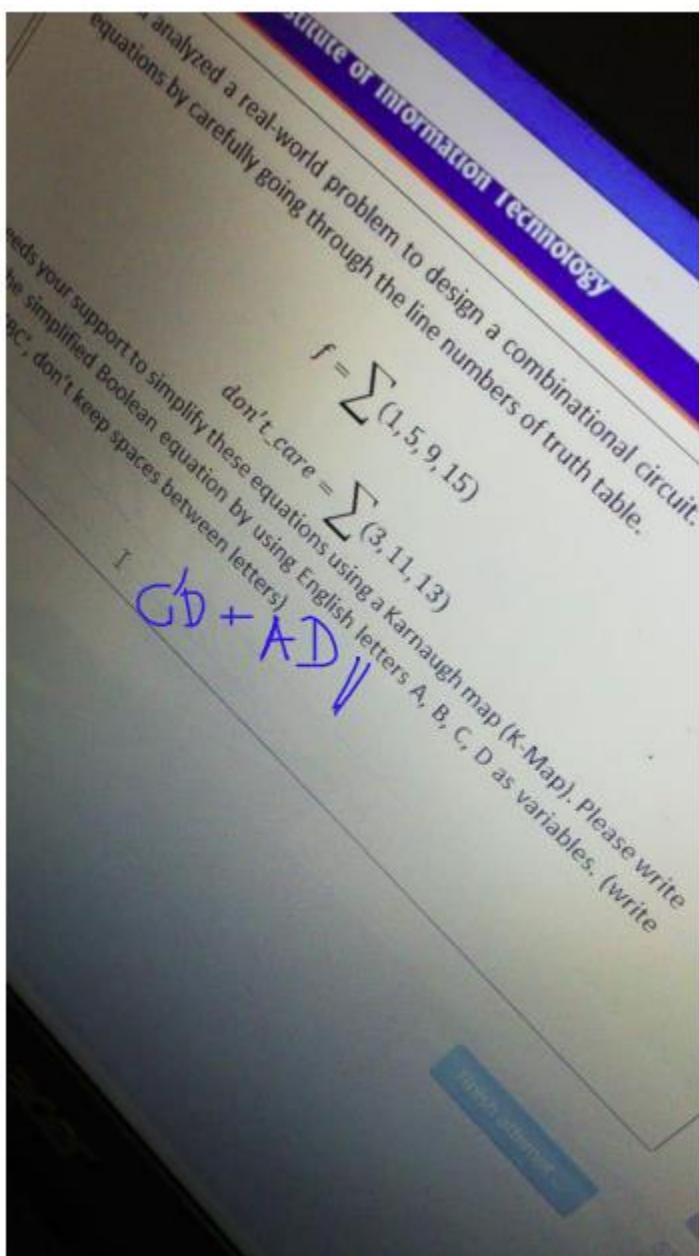
Select the correct logic circuit categories

Select the correct logic circuit categories

Select one:

- a. Multiplexer
- b. Input and output
- c. Encoder
- d. Combinational and sequential
- e. Comparator circuits

Sunil analyzed a real world problem to design a combinational circuit. He derived following equations by carefully going through the line numbers of truth table



Sunil analyzed a real world problem to design a combinational circuit. He derived following equations by carefully going through the line numbers of truth table

Sunil analyzed a real-world problem to design a combinational circuit. He derived following equations by carefully going through the line numbers of truth table.

$$f = \sum(9, 12, 14, 15)$$
$$don't_care = \sum(4, 11, 13)$$

He needs your support to simplify these equations using a Karnaugh map (K-Map). Please write down the simplified Boolean equation by using English letters A, B, C, D as variables. (write $\bar{A}B\bar{C}$ as $A'BC'$, don't keep spaces between letters)

Answer:

AD + AB,

Change the following IP address from binary notation to dotted decimal

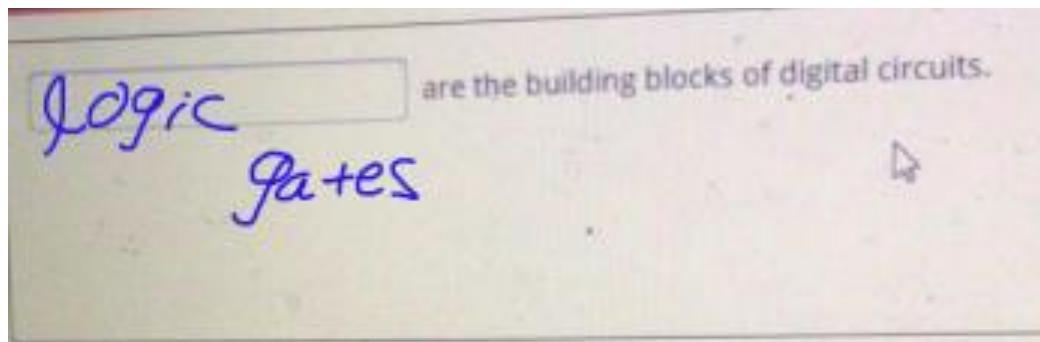
Change the following IP address from binary notation to dotted decimal

Binary Form = 10101100 00010001 11001001 00001010

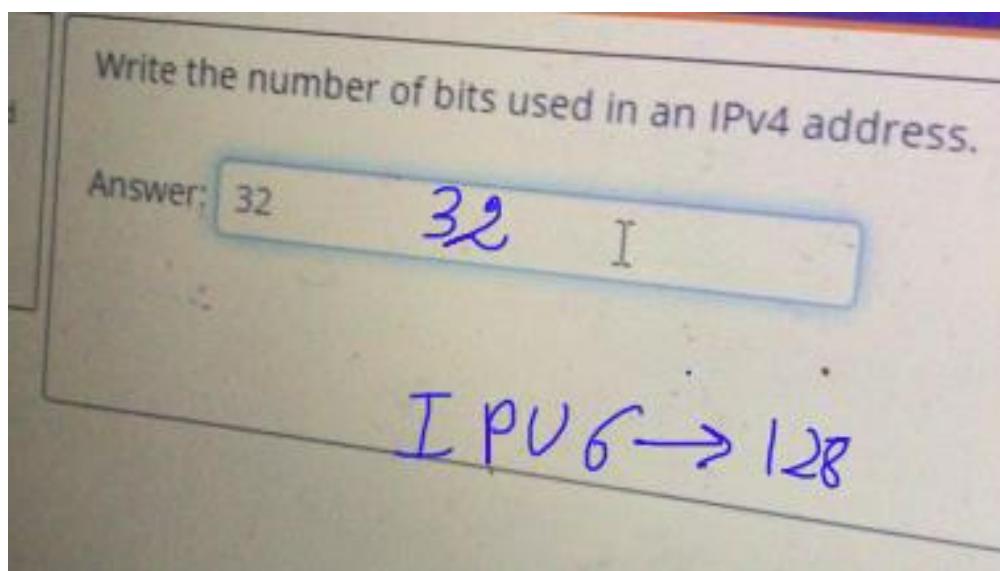
- IPv4 Address in Decimal: 172 . 17 . 201 . 10
- IP Address Class: B

B

..... Are the building blocks of digital circuits



Write the number of bits used in an IPv4 address



Which of the following statements describe the network shown in the graphic

Which of the following statements describe the network shown in the graphic? (Select two)

The diagram illustrates a network topology with the following components and connections:

- Router-PT Router0** is connected to **Switch-SW1** and **Switch-SW2**.
- Router-PT Router1** is connected to **Switch-SW2** and **Switch-SW3**.
- Switch-SW1** is connected to **PC-PT PC0**, **PC-PT PC3**, and **PC-PT PC4**.
- Switch-SW2** is connected to **PC-PT PC5** and **PC-PT PC8**.
- Switch-SW3** is connected to **PC-PT PC6** and **PC-PT PC7**.

A large blue oval encloses **PC0**, **PC3**, **PC4**, **Switch-SW1**, and **Switch-SW2**. A smaller blue oval encloses **PC5**, **PC8**, **Switch-SW2**, and **Switch-SW3**. These two ovals represent the collision domains.

Select one or more:

- There are total number of seven collision domains in the network.
- There are total number of four collision domains in the network.
- There are total number of eight collision domains in the network.
- There are total number of two broadcast domains in the network.
- There are total number of four broadcast domains in the network.
- There are total number of three broadcast domains in the network.

Select the incorrect statement

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Select the incorrect statement.

Incorrect statement:

- Internet: A collection of networks larger than a LAN, but smaller than a WAN, such as a ISP, is called a MAN.
- LAN: A collection of computers sharing the same resources.
- MAN: A collection of computers sharing the same resources over a relatively small geographical area.
- WAN: A collection of computers sharing the same resources over a relatively large geographical area.

Quiz navigation:

| | | | | | |
|-------------|----|----|----|----|----|
| DECLARATION | 1 | 2 | 3 | 4 | 5 |
| QUESTION | 6 | 7 | 8 | 9 | 10 |
| ANSWER | 11 | 12 | 13 | 14 | 15 |
| ANSWER | 16 | 17 | 18 | 19 | 20 |
| ANSWER | 21 | 22 | 23 | 24 | 25 |
| ANSWER | 26 | 27 | 28 | 29 | 30 |
| ANSWER | 31 | 32 | 33 | 34 | 35 |
| ANSWER | 36 | 37 | 38 | 39 | 40 |
| ANSWER | 41 | 42 | 43 | 44 | 45 |
| ANSWER | 46 | 47 | 48 | 49 | 50 |

ANSWER

Select the correct statement

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Select the correct statement.

Correct statement:

- None of the given statements are true.
- If a network is directly connected to the Internet, it will become a part of Internet.
- A private network is not directly connected to the Internet.
- In a public network, it is mandatory to follow a set of standards.
- A private network is a set of interconnected networks.

Quiz navigation:

| | | | | | |
|-------------|----|----|----|----|----|
| DECLARATION | 1 | 2 | 3 | 4 | 5 |
| QUESTION | 6 | 7 | 8 | 9 | 10 |
| ANSWER | 11 | 12 | 13 | 14 | 15 |
| ANSWER | 16 | 17 | 18 | 19 | 20 |
| ANSWER | 21 | 22 | 23 | 24 | 25 |
| ANSWER | 26 | 27 | 28 | 29 | 30 |
| ANSWER | 31 | 32 | 33 | 34 | 35 |
| ANSWER | 36 | 37 | 38 | 39 | 40 |
| ANSWER | 41 | 42 | 43 | 44 | 45 |
| ANSWER | 46 | 47 | 48 | 49 | 50 |

ANSWER

Which of the following is not a file extension of a compressed file

Which of the following is not a file extension of a compressed file

Select one:

- a. All are compressed file extensions
- b. .zip
- c. .pkg
- d. .gz
- e. .tar.gz

Which of the following is not a benefit of layered networking model

Which of the following is not a benefit of the layered networking model?

Select one:

- a. Provides a common language ✓
- b. Allows one organization to control the protocol design ✗
- c. Changes in one layer do not affect other layers ✓
- d. Assists in protocol design ✓
- e. Create a competition between vendors ✓

Select the statement which is not true

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Select the statement which is not true.

Select one:

- The internet is defined as a global mesh of interconnected networks.
- The internet is owned by Internet Society (ISOC).
- The internet architecture standards are defined by Internet Architecture Board.
- The protocols related to the Internet is defined by IETF and IRTF
- The internet is a public network.

Select the correct statements about network characteristics

Select the correct statements about network characteristics. (Select two)

Select one or more:

- The logical topology is the arrangement of cables, network devices, and end systems.
- The data rate is measured by bits per second of a given link in the network.
- Availability is a measure of the probability that the network will be available for use when it is required.
- Scalability indicates how many nodes are currently on the network.
- Reliability indicates the non-dependability of the components that make up the network.

Which of the following statements describe the network shown in the graphic

ed
in

Which of the following statements describe the network shown in the graphic? (Select two)

```
graph TD; Router0[Router-PT Router0] --- Switch0[Switch-PT Switch0]; Router0 --- Switch1[Switch-PT Switch1]; Switch0 --- PC0[PC-PT PC0]; Switch0 --- PC3[PC-PT PC3]; Switch0 --- PC4[PC-PT PC4]; Switch1 --- PC5[PC-PT PC5]; Switch1 --- PC6[PC-PT PC6]; Switch1 --- PC7[PC-PT PC7]
```

Select one or more:

- There are total number of six broadcast domains in the network.
- There are total number of eight collision domains in the network.
- There are total number of four collision domains in the network.
- There are total number of seven collision domains in the network.
- There are total number of two broadcast domains in the network.
- There are total number of four broadcast domains in the network.

Steps of designing a digital circuit to solve a real world problem is given below

Steps of designing a digital circuit to solve a real world problem is given below:

- A. K-maps are used to simplify the equations.
- B. The truth table is developed
- C. Implemented using logic gates
- D. The problem is analyzed
- E. Identify input variables and output variables

Find the correct order of execution.

Select one:

- a. B.D.E.C.A
- b. D.C.B.E.A
- c. A.C.B.D.E
- d. D.E.B.A.C

EACBED

Match the correct port category description to port numbers

Match the correct port category description to port numbers.

Registered port numbers

1024 to 49151



Well-known port numbers

0 to 1023



Dynamic/Private port numbers

49152 to 65535



Which characteristics is not addressed by a network architecture design

Which **characteristic** is not addressed by a network architecture design.

Select one:

- Durability ✓
- Fault Tolerance ✓
- Security ✓
- Scalability ✓
- Quality of Service ✓

What is the correct decimal

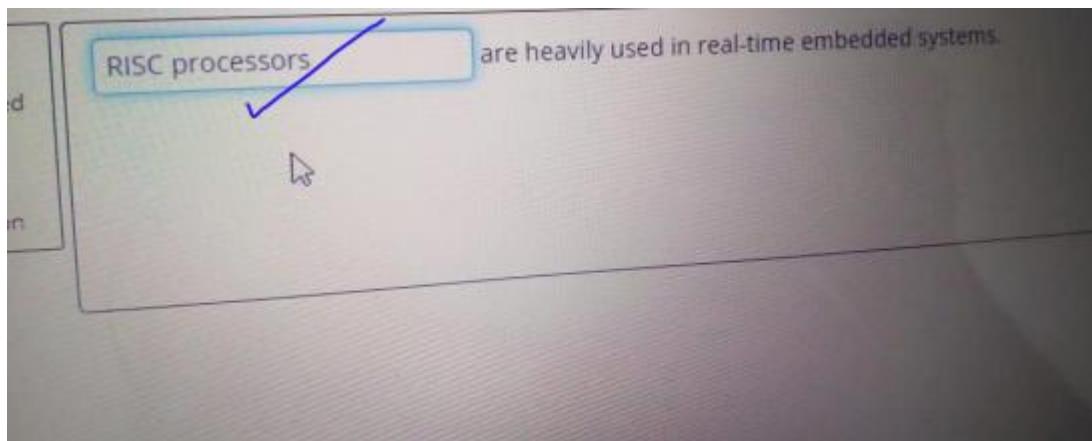
What is the correct decimal representation of the following IP address?

11000000.10101000.00001010.00001011

Select one:

- a. 192.168.10.1
- b. 192.128.0.11
- c. 192.168.10.11
- d. 192.148.0.11
- e. 172.11.10.11

..... Are heavily used in real -time embedded systems



Which is considerd as most advanced ROM

Which is considered as most advanced ROM

Select one:

- a. DRAM
- b. ROM
- c. RAM
- d. EEPROM
- e. PROM

Which of the following statement is NOT true

Which of the following statement is NOT true?

Select one:

- a. Unguided media signals are transmitted into air
- b. Fiber optics is an example of Unguided media
- c. Unguided media uses electromagnetic waves
- d. Unguided media are also known as wireless communication
- e. Unguided media transmission requires an antenna

Complete the missing parts of the binary of following IPv4 address

Complete the missing parts of the binary form of following IPv4 address:

IPv4 Address: 225.178.11.4

- IPv4 Address in Binary: . . .
- How Many Hosts Can be Connected this Network:

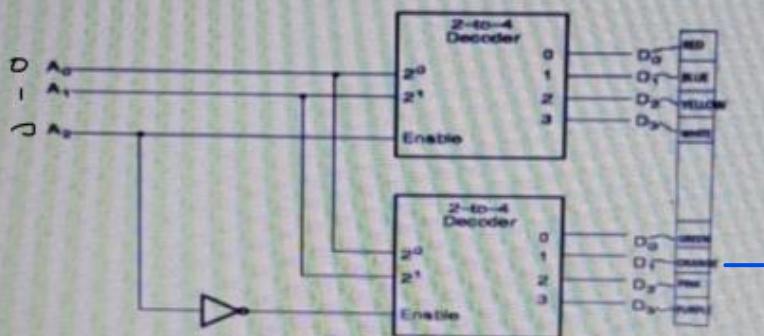
Copper cables are one of the most popular wired transmission medium because

Copper cables are one of the most popular wired transmission medium because.

Select one:

- There are multiple number of cables.
- It uses differential signaling for signal transmission.
- It is the only guided medium available.
- Copper cables can bend in any direction.
- It is less costly in maintenance and installation.

Following is the block diagram of a Combinational circuit which is made up of two 2-4 Decoders. Assume that each of the output lines of a Decoder is connected to a colored LED bulb as given in the diagram.



The functionality of the 2-4 decoder is given below.

| Inputs | | | Outputs | | | |
|--------|----|----|---------|----|----|----|
| A2 | A1 | A0 | D0 | D1 | D2 | D3 |
| 1 | 0 | 0 | 1 | 0 | 0 | 0 |
| 1 | 1 | 0 | 0 | 1 | 0 | 0 |
| 1 | 0 | 1 | 0 | 0 | 1 | 0 |
| 1 | 1 | 1 | 0 | 0 | 0 | 1 |
| 0 | X | X | 0 | 0 | 0 | 0 |

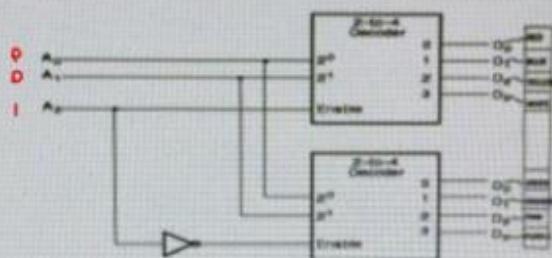
- a. What are the input values that must be provided for A2, A1, A0 respectively, to have the ORANGE light ON? **010**
- b. What are the input values that must be provided for A2, A1, A0 respectively, to have the RED light ON? **100**
- c. If you need to have both the BLUE and ORANGE lights ON, what is the modification you need to do to the above circuit? **Remove the NOT Gate**

Question 27

Not yet answered
Marked out of
1.00

* Flag question

Following is the block diagram of a Combinational circuit which is made up of two 2-4 Decoders. Assume that each of the output lines of a Decoder is connected to a colored LED bulb as given in the diagram.

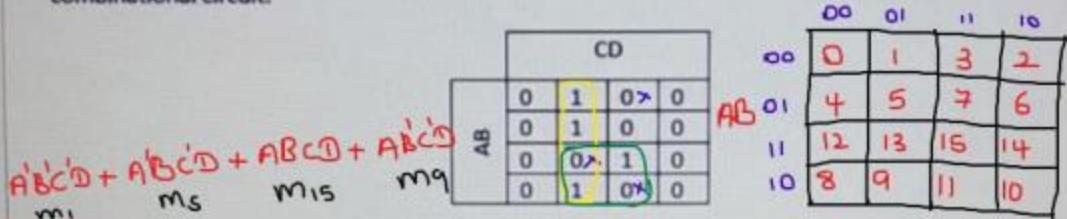


The functionality of the 2-4 decoder is given below.

| Inputs | | | Outputs | | | |
|--------|----|----|---------|----|----|----|
| A2 | A1 | A0 | D0 | D1 | D2 | D3 |
| 1 | 0 | 0 | 1 | 0 | 0 | 0 |
| 1 | 1 | 0 | 0 | 1 | 0 | 0 |
| 1 | 0 | 1 | 0 | 0 | 1 | 0 |
| 1 | 1 | 1 | 0 | 0 | 0 | 1 |
| 0 | X | X | 0 | 0 | 0 | 0 |

- a. What are the input values that must be provided for A2, A1, A0 respectively, to have the BLUE light ON? **110**
- b. What are the input values that must be provided for A2, A1, A0 respectively, to have the GREEN light ON? **000**
- c. If you need to have both the RED and GREEN lights ON, what is the modification you need to do to the above circuit? **Remove the NOT Gate**

One of your friends has come to you with following K-Map that he developed after carefully going through a Truth Table to represent input-output relationships of a real world problem with the aim of designing a combinational circuit.



A. Write the minterm numbers that will be in the Boolean equation represented by the K-Map above. (Ex: use m₁ to represent minterm 1) m_1, m_5, m_{15}, m_9

B. After carefully studying the problem again, you found out that it is not a problem even minterms 3, 11, and 13 being 0 or 1. By taking your new findings into consideration, simplify above K-map. Write the simplified Boolean equation in Sop form. (Write $ABC\bar{D}$ as $AB'CD'$ in your answer. Don't keep spaces between letters)

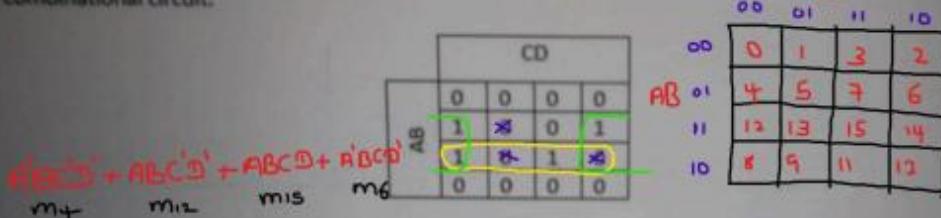
$$C'D + AD$$

C. How many AND gates and OR gates are needed to implement this circuit.

i) AND: 2

ii) OR: 1

One of your friends has come to you with following K-Map that he developed after carefully going through a Truth Table to represent input-output relationships of a real world problem with the aim of designing a combinational circuit.



A. Write the minterm numbers that will be in the Boolean equation represented by the K-Map above. (Ex: use m₁ to represent minterm 1) m_4, m_{12}, m_{15}, m_6

B. After carefully studying the problem again, you found out that it is not a problem even minterms 5, 13, and 14 being 0 or 1. By taking your new findings into consideration, simplify above K-map. Write the simplified Boolean equation in Sop form. (Write $ABC\bar{D}$ as $AB'CD'$ in your answer. Don't keep spaces between letters)

$$AB + BD'$$

C. How many AND gates and OR gates are needed to implement this circuit.

i) AND: 2

ii) OR: 1

Sunil analyzed a real-world problem to design a combinational circuit. He derived follow equations by carefully going through the line numbers of truth table.

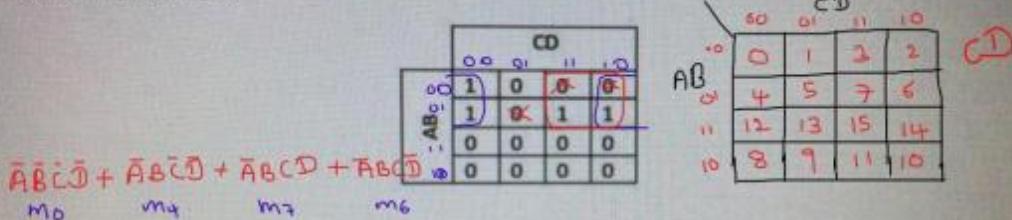
$$f = \sum (9, 12, 14, 15)$$

$$\text{don't_care} = \sum (4, 11, 13)$$

He needs your support to simplify these equations using a Karnaugh map (K-Map). Please write down the simplified Boolean equation by using English letters A, B, C, D as variables. (write $\bar{A}\bar{B}\bar{C}$ as $A'BC'$, don't keep spaces between letters)

Answer: $AB + AD$

One of your friends has come to you with following K-Map that he developed after carefully going through a Truth Table to represent input-output relationships of a real world problem with the aim of designing a combinational circuit.



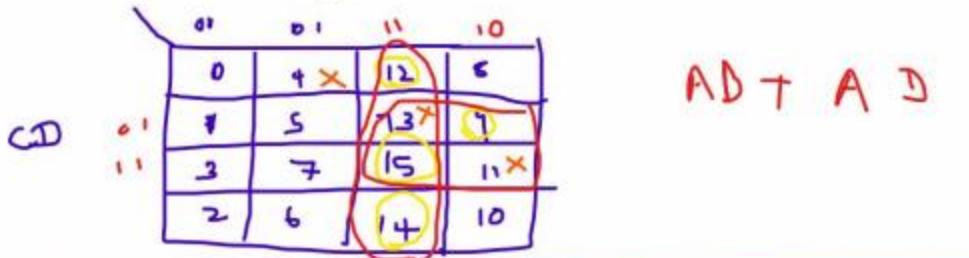
A. Write the minterm numbers that will be in the Boolean equation represented by the K-Map above. (Ex: use m_1 to represent minterm 1) m_0, m_4, m_7, m_6

B. After carefully studying the problem again, you found out that it is not a problem even minterms 2, 3, and 5 being 0 or 1. By taking your new findings into consideration, simplify above K-map. Write the simplified Boolean equation in SoP form. (Write $ABCD$ as $AB'CD'$ in your answer. Don't keep spaces between letters) $A'D' + A'C$

C. How many AND gates and OR gates are needed to implement this circuit.

i) AND: 2

ii) OR: 1



Sunil analyzed a real-world problem to design a combinational circuit. He derived following equations by carefully going through the line numbers of truth table.

$$f = \sum (1, 5, 9, 15)$$

$$\text{don't_care} = \sum (3, 11, 13)$$

AB

| | | | | |
|----|---|---|----|-----|
| 00 | 0 | 4 | 12 | 5 |
| 01 | 1 | 5 | 13 | 9 |
| 11 | 3 | 7 | 15 | 11x |
| 10 | 2 | 6 | 14 | 10 |

He needs your support to simplify these equations using a Karnaugh map (K-Map). Please write down the simplified Boolean equation by using English letters A, B, C, D as variables. (write $\bar{A}\bar{B}\bar{C}$ as $A'B'C'$, don't keep spaces between letters)

Answer: $A'B + BC$ AD + C'D

Sunil analyzed a real-world problem to design a combinational circuit. He derived following equations by carefully going through the line numbers of truth table.

$$f = \sum (2, 3, 6, 15)$$

$$\text{don't_care} = \sum (5, 7, 11)$$

AB

| | | | | |
|----|---|---|----|-----|
| 00 | 0 | 4 | 12 | 8 |
| 01 | 1 | 5 | 13 | 9 |
| 11 | 3 | 7 | 15 | 11x |
| 10 | 2 | 6 | 14 | 10 |

He needs your support to simplify these equations using a Karnaugh map (K-Map). Please write down the simplified Boolean equation by using English letters A, B, C, D as variables. (write $\bar{A}\bar{B}\bar{C}$ as $A'B'C'$, don't keep spaces between letters)

Answer: $A'C + CD$

Nimal and his team analyzed a real-world problem to design a combinational circuit. They derived following truth table to record input [A, B, C, D] and output [f] behavior. They entered "x" in the output column where they don't care whether output is "0" or "1".

| A | B | C | D | f |
|---|---|---|---|---|
| 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 1 | 0 |
| 0 | 0 | 1 | 0 | 1 |
| 0 | 0 | 1 | 1 | x |
| 0 | 1 | 0 | 0 | 0 |
| 0 | 1 | 0 | 1 | x |
| 0 | 1 | 1 | 0 | 1 |
| 0 | 1 | 1 | 1 | x |
| 1 | 0 | 0 | 0 | 0 |
| 1 | 0 | 0 | 1 | 0 |
| 1 | 0 | 1 | 0 | 0 |
| 1 | 0 | 1 | 1 | x |
| 1 | 1 | 0 | 0 | 0 |
| 1 | 1 | 0 | 1 | 0 |
| 1 | 1 | 1 | 0 | 0 |
| 1 | 1 | 1 | 1 | 1 |

He needs your support to simplify output behavior function using a Karnaugh map (K-Map). Please write down the simplified Boolean function by using English letters A, B, C, D as variables. (write \bar{ABC} as \bar{ABC} , don't keep spaces between letters).

$A'c + CD$

$A'c + CD$

1. Select the most suitable statement. Select one

Question 24
Not yet answered
Marked out of 0.6
[Flag question](#)

Select the most suitable statement.

Select one:

- Converged networks are LANs.
- None of the given statements are true.
- Converged networks carry data, voice, video & images over the same network.
- Converged networks are private networks.
- Converged networks carry social networking data.

[Next p.](#)

2. What are the correct statements about “MAC address table”? (Select two)

What are the correct statements about “MAC address table”? (select two)

Select one or more:

- MAC address table is used by routers
- MAC address table is created for each computer
- MAC address table is used by switches
- MAC address table is a collection of MAC addresses with the respective connected ports
- None of the given answers are true

3. Copper cables are one of the most popular wired transmission medium because,

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Copper cables are one of the most popular wired transmission medium because, copper cables are one of the most popular wired transmission medium because

Select one:

- It is less costly in maintenance and installation.
- It is the only guided medium available.
- It uses differential signaling for signal transmission.
- Copper cables can bend in any direction.
- There are multiple number of cables.

4. What is a main difference between a Switch and a Bridge?

What is a main difference between a Switch and a Bridge?

Select one:

- Switch is large and a bridge is small.
- A bridge is used to connect LANs whereas a switch is used to create a LAN
- Bridge is used to segment a LAN while Switch is used to interconnect different LANs.
- There is no difference.
- Bridge is a dumb device while switch is an intelligent device.

5. Select the incorrect statement,

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Select the incorrect statement.

Select one:

- A network spanning over a geographical area larger than a LAN, but smaller than a WAN, such as a city, is called a MAN.
- Switches are used to connect LANs to a WAN.
- A WAN spans across a large geographical area. It is a geographically-dispersed collection of LANs.
- Internet is the largest WAN spanning the entire globe.
- A LAN connects network devices over a relatively small geographical area.

6. What is the service that usually an OS doesn't execute

What is the service that usually an OS doesn't execute

Select one:

- a. Firmware management
- b. Storage management
- c. Security management
- d. Process management
- e. File system management

7.Which one is not optical media devices

Which one is not optical media devices

Select one:

- a. CD R
- b. Blue-ray
- c. CD
- d. Hard disk
- e. DVD

7. Select the answer which explains how SI and DI are used respectively
Select one

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select the answer which explains how SI and DI are used respectively

Select one:

- a. Used with extended addressing commands, used in some addressing modes
- b. Used for multiplying and dividing, used as an address register
- c. Used as an addressing register, used for multiplying and dividing
- d. Used in some addressing modes, used with extended addressing commands
- e. Used for arithmetic operation, used with extended addressing commands

8. Network address speed(In Mbps) of a certain device is equal 32. What is the networking speed of the device in Kilobytes/sec

Network address speed(in Mbps) of a certain device is equal 32. What is the networking speed of the device in Kilobytes/sec

Select one:

- a. 32×100 kilobytes
- b. 32×10 kilobytes
- c. 4×1000 kilobytes
- d. 32×1000 kilobytes
- e. 8×1000 kilobytes

9. A logic gate can have

A logic gate can have

Select one:

- a. Single input and many outputs
- b. Many inputs and many outputs
- c. A single input and a single output
- d. None of the above
- e. Many inputs and a single output

10. Von Neumann architecture was found in 1945. During which period Von neumann architecture was used
Select one

Von Neumann architecture was found in 1945. During which period Von Neumann architecture was used

Select one:

- a. Between 3rd generation to 4th generation
- b. Between 1st generation to 3rd generation
- c. Between 1st generation to present
- d. Between 2nd generation to 3rd generation
- e. Between 1st generation to 2nd generation

11. Select the correct statements about network characteristics. (Select two)

Select the correct statements about network characteristics. (Select two)

Select one or more:

- The data rate is measured by bits per second of a given link in the network.
- Reliability indicates the non-dependability of the components that make up the network.
- Scalability indicates how many nodes are currently on the network.
- The logical topology is the arrangement of cables, network devices, and end systems.
- Availability is a measure of the probability that the network will be available for use when it is req

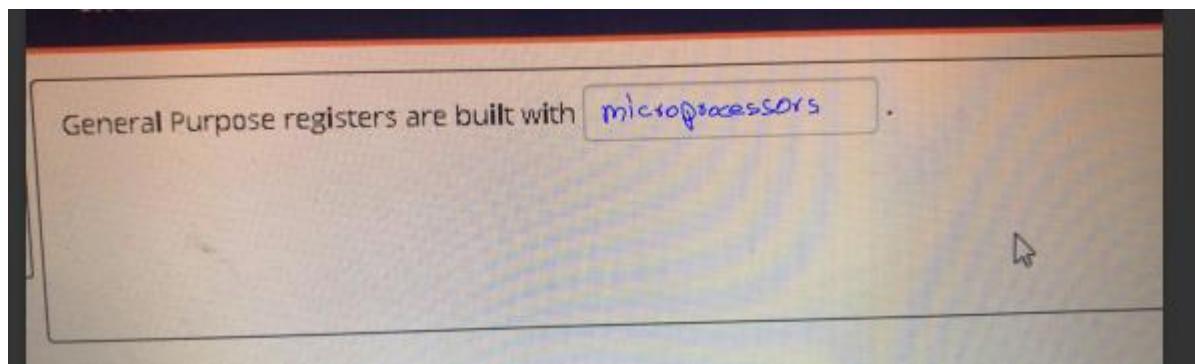
12. Device on one network can communicate with devices on another network via. (select two)

Devices on one network can communicate with devices on another network via, (Select two)

Select one or more:

- Gateway
- Multiplexer
- Hub
- Router
- Printer

13. General Purpose registers are built with.....



14. Binary coded decimal for number 12 is 0001 0010. Binary coded decimal for number 45 is 0...
the binary coded decimal for number 52

Binary coded decimal for number 12 is 0001 0010 .Binary coded decimal for number 45 is 0
the binary coded decimal for number 52

Select one:

- a. 0101 0010
- b. 0110 0010
- c. 0101 0011
- d. 0001 0100
- e. 1101 0010

15. Calculate the number of total number of storage locations available for 8 bits of information
Select one

Calculate the number of total number of storage locations available for 8 bits of information

Select one:

- a. 127
- b. 256
- c. 255
- d. 32
- e. 16

16. What is the amount of bits that require to address 256MB

Select one

What is the amount of bits that require to address 256MB

Select one:

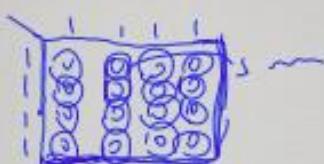
- a. 28
- b. 30
- c. 42
- d. 26
- e. 32

17. How many minterms in a 4 variable K-map

How many minterms in a 4 variable K-map

Select one:

- a. 16
- b. 64
- c. 4
- d. 8
- e. 12



18. Which of the following statement are true? (Select two)

Which of the following statements are true? (select two).

Select one or more:

- Point-to-Point connection provides a dedicated link between the two devices.
- Point to point connection is always build using a wireless media.
- Multi-point connection is always build using a wireless media.
- Point to point connection is always build using a copper cable.
- A multipoint connection is a connection established between more than two devices.

19. Match the given addresses to appropriate network addressing term.

Match the given addresses to appropriate network addressing term.

| | | |
|------------------------------|--|--|
| 255.0.0.0 | | <input type="button" value="Choose..."/> |
| 34-F3-9A-36-68-BB | | <input type="button" value="Choose..."/> |
| 2001:db8:85a3::8a2e:370:7334 | | <input type="button" value="Choose..."/> |
| 172.16.10.9 | | <input type="button" value="Choose..."/> |
| 255.255.255.0 | | <input type="button" value="Choose..."/> |

Choose...

- Choose...
- Class C Subnet Mask
- IPv4 Address
- MAC Address
- IPv6 Address
- Class A Subnet Mask

20. Inputs and outputs can be defined as the main components of a computer. Select the response only with input devices from the following answers.

Inputs and outputs can be defined as the main components of a computer. Select the response only with input devices from the following answers

Select one:

- a. Keyboard, Pen-drive, Scanner, Bar code reader
- b. Keyboard, Webcam, Pen-drive, Scanner
- c. Keyboard, Optical pen, CD, Scanner
- d. Keyboard, Optical pen, Scanner, Bar code reader
- e. Keyboard, CD, Optical pen, Bar code reader

21. Not the component in the CPU

Not the component in the CPU

Select one:

- a. Main memory
- b. Registers
- c. ALU
- d. Control memory
- e. Sequencing logic

22. Which of the following is not a benefit of the layered networking model?

Which of the following is not a benefit of the layered networking model?

Select one:

- a. Provides a common language
- b. Assists in protocol design
- c. Changes in one layer do not affect other layers
- d. Create a competition between vendors
- e. Allows one organization to control the protocol design

23. Which of the following is not a file extension of a compressed file

Select one

Which of the following is not a file extension of a compressed file

Select one:

- a. .zip
- b. .gz
- c. .tar.gz
- d. .pkg
- e. All are compressed file extensions

24. Which of the following statement is NOT true?

Select one

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Which of the following statement is NOT true?

Select one:

- a. Fiber optics is an example of Unguided media
- b. Unguided media signals are transmitted into air
- c. Unguided media are also known as wireless communication
- d. Unguided media transmission requires an antenna
- e. Unguided media uses electromagnetic waves

25. Which of the following statement describe the network shown in the graphic? (Select two)

Which of the following statements describe the network shown in the graphic? (Select two)

Select one or more:

- There are total number of four broadcast domains in the network.
- There are total number of four collision domains in the network.
- There are total number of seven collision domains in the network.
- There are total number of two broadcast domains in the network.
- There are total number of five collision domains in the network.
- There are total number of six broadcast domains in the network.

26. Network address speed(In Mbps) of a certain device is equal 32. What is the networking speed of the device in Kilobytes/sec

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Network address speed(In Mbps) of a certain device is equal 32. What is the networking speed of the device in Kilobytes/sec

Select one:

- a. 32×100 kilobytes
- b. 8×1000 kilobytes
- c. 32×1000 kilobytes
- d. 32×10 kilobytes
- e. 4×1000 kilobytes

27. What is not a technology used in Local Area Networks (LAN)

Select one

What is **not** a technology used in Local Area Networks (LAN)

Select one:

- Ethernet
- Virtual Private Network
- 10 Gigabit Ethernet
- Token ring
- Fast Ethernet

28. Not the component in the CPU

Select one:

Not the component in the CPU

Select one:

- a. Registers
- b. Main memory
- c. Sequencing logic
- d. Control memory
- e. ALU

29. Select the correct segment from the following

Select one

Select the correct segment from the following

Select one:

- a. SI
- b. ES
- c. AX
- d. BP
- e. DI

Next

30. Select the correct statement about hubs

Select the correct statement about hubs.

Select one:

- None of the given statements are true.
- Hub always broadcast messages.
- Hub maintains a MAC table for data forwarding
- Hub functions are similar to switch.
- Hub always unicast messages.

31. Match the ISO-OSI Layer to correct address type used in Network Communications

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Match the ISO-OSI Layer to correct address type used in Network Communications.

Question 15
Not yet answered
Marked out of 0.6
Flag question

Data Link Layer
Network Layer
Transport Layer
IP address

Choose MacL -
IP add -
port num

Next page

32. What is the correct statement about a collision Domain?

Select one

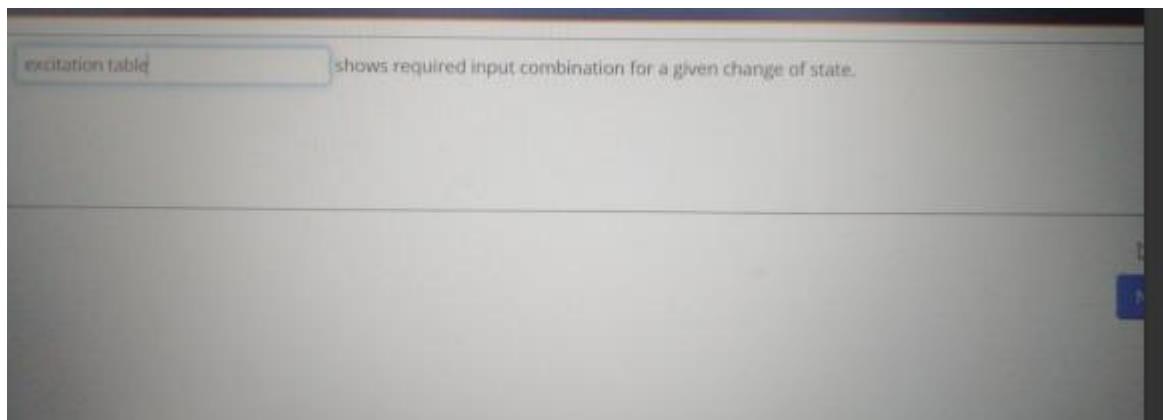
What is the correct statement about a Collision Domain?

Select one:

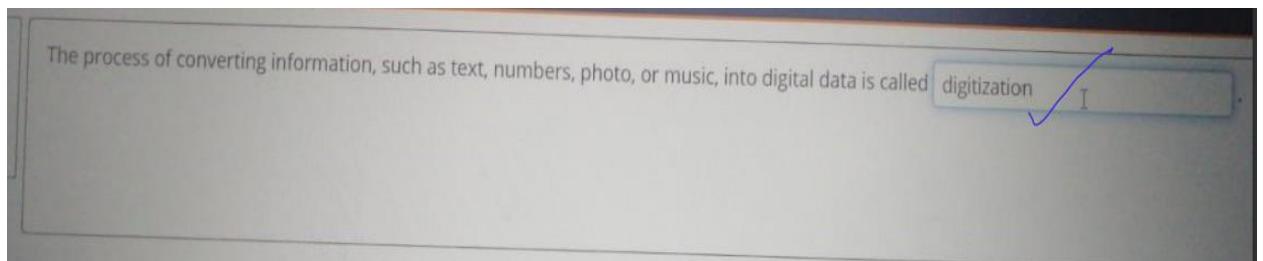
- A collection of two or more computers in which, one computer tries to send data after another computer, the signals will collide in the transmission media and make all the sent information unusable.
- None of the mentioned is true.
- A collection of two or more computers in which, if one sender tries to send data, the signal will collide in the transmission media and make the sent information unusable.
- In a router, all ports are in a single collision domain
- A collection of two or more computers in which, if more than one sender tries to send data simultaneously, the signals will collide in the transmission media and make all the sent information unusable.

Next page

33.shows required input combination for a given change of state



34. The process of converting information, such as text, numbers, photos, or music, into digital data is called.....



35. What is not an operating system activity under the storage management

Select one

What is not an operating system activity under the storage management

Select one:

- a. Backup and reset
- b. Disk scheduling
- c. Storage allocation
- d. Free-space management
- e. None of above

Next page

36. Select the most suitable statement

Select one

Select the most suitable statement.

Select one:

- Converged networks are LANs.
- None of the given statements are true.
- Converged networks carry data, voice, video & images over the same network.
- Converged networks are private networks.
- Converged networks carry social networking data.

Next p

37. Select one or more

Select one or more:

- There are total number of five collision domains in the network.
- There are total number of two broadcast domains in the network.
- There are total number of four broadcast domains in the network.
- There are total number of four collision domains in the network.
- There are total number of seven collision domains in the network.
- There are total number of six broadcast domains in the network.

38. Choose the correct storage device that works as a non-volatile memory

Select one

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Choose the correct storage device that works as a non-volatile memory

Select one:

- a. BIOS chip
- b. S-RAM
- c. Registers
- d. D-RAM
- e. Cache memory

39. Select the incorrect statement

Select one

Select the **incorrect** statement.

Select one:

- A WAN spans across a large geographical area. It is a geographically-dispersed collection of LANs.
- Internet is the largest WAN spanning the entire globe.
- A network spanning over a geographical area larger than a LAN, but smaller than a WAN, such as a city, is called a MAN.
- Switches are used to connect LANs to a WAN.
- A LAN connects network devices over a relatively small geographical area.

40. Which of the following is a primary memory?

Select one

Which of the following is a primary memory.

Select one:

- a. Floppy disk
- b. SSD
- c. ROM
- d. HDD
- e. CD

41. What instructions can only executable in Kernel mode

What instructions can only executable in kernel mode

Select one:

- a. Operating system
- b. Program
- c. Instructions designated as privileged
- d. Firmware
- e. None of the above

42. Network address speed(In Mbps) of a certain device is equal 32. What is the networking speed of the device in Kilobytes/ sec

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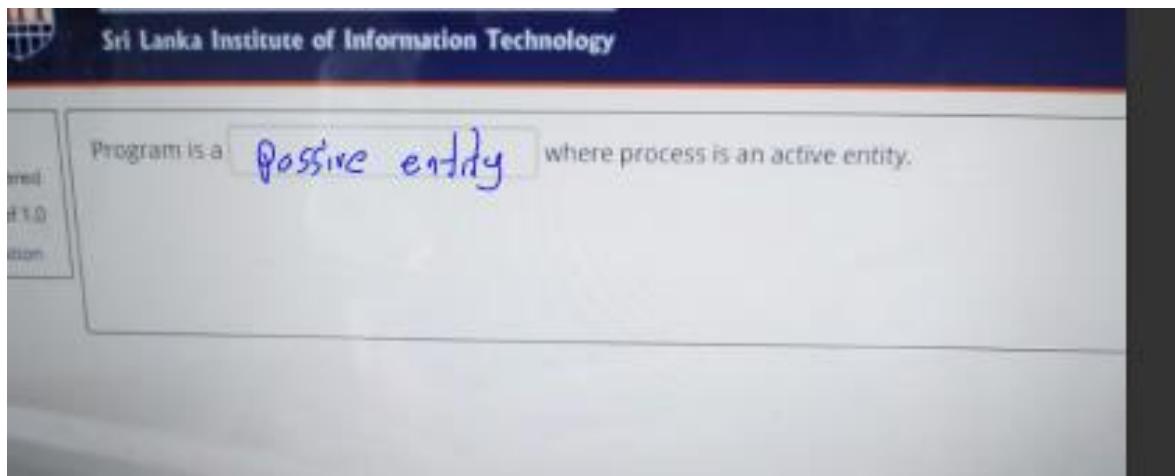
Network address speed(In Mbps) of a certain device is equal 32. What is the networking speed of the device in Kilobytes/sec

Select one:

- a. 32×100 kilobytes
- b. 8×1000 kilobytes
- c. 32×1000 kilobytes
- d. 4×1000 kilobytes
- e. 32×10 kilobytes

[Next page](#)

43. Program is a where process is an active entity



44. What is the correct statement about a Broadcast Domain?

A screenshot of a computer monitor displaying a question and a list of options. The question is "What is the correct statement about a Broadcast Domain?". Below the question, the instruction "Select one:" is followed by a list of five statements, each preceded by a radio button. The fifth statement is marked with a blue circle, indicating it is the correct answer. The statements are: 1) A collection of two or more computers in which, when one sender sends a message, it is received by a group of computers in the same domain. 2) None of the mentioned is true. 3) A collection of two or more computers in which, when one sender sends a message, it is received by all the others in the same domain. 4) A collection of two or more computers in which, when one sender sends a message, it is received by one receiver in the same domain. 5) A collection of two or more computers in which, when one sender sends a message, it is received by all the others in a different domains.

45. One of your friends has come to you with following K-Map that he developed after carefully going through a Truth table to represent input-output relationships of a real world problem with that aim of designing a combinational circuit.

One of your friends has come to you with following K-Map that he developed after carefully going through a Truth Table to represent input-output relationships of a real world problem with the aim of designing a combinational circuit.

| | | CD | | | |
|----|---|----|---|---|---|
| | | 0 | 1 | 0 | 0 |
| AB | 0 | 0 | 1 | 0 | 0 |
| | 1 | 0 | 0 | 1 | 0 |

A. Write the minterm numbers that will be in the Boolean equation represented by the K-Map above. (Ex: use m_1 to represent minterm 1)

B. After carefully studying the problem again, you found out that it is not a problem even minterms 3, 11, and 13 being 0 or 1. By taking your new findings into consideration, simplify above K-map. Write the simplified Boolean equation in SOP form. (Write $A\bar{B}C\bar{D}$ as $AB'C'D'$ in your answer. Don't keep spaces between letters)

C. How many AND gates and OR gates are needed to implement this circuit.

i) AND:

ii) OR:

NetExam

Quiz navigation

Finish attempt ...

Time left 0:46:51

MULTIPLE CHOICE QUESTIONS MARKS

| | | | | | |
|----|----|----|----|----|----|
| 1 | 2 | 3 | 4 | 5 | 6 |
| 9 | 10 | 11 | 12 | 13 | 14 |
| 17 | 18 | 19 | 20 | 21 | 22 |
| 25 | 26 | 27 | 28 | 29 | 30 |
| 33 | 34 | 35 | 36 | 37 | 38 |

STRUCTURED TYPE QUESTIONS

| | | | | | |
|----|----|----|----|----|----|
| 41 | 42 | 43 | 44 | 45 | 46 |
|----|----|----|----|----|----|

ESSAY TYPE QUESTION 1 X 15 M

| |
|----|
| 47 |
|----|

FEEDBACK

| |
|----|
| 48 |
|----|

46. What is the amount of bits that require to address 256MB

What is the amount of bits that require to address 256MB

Select one:

a. 42

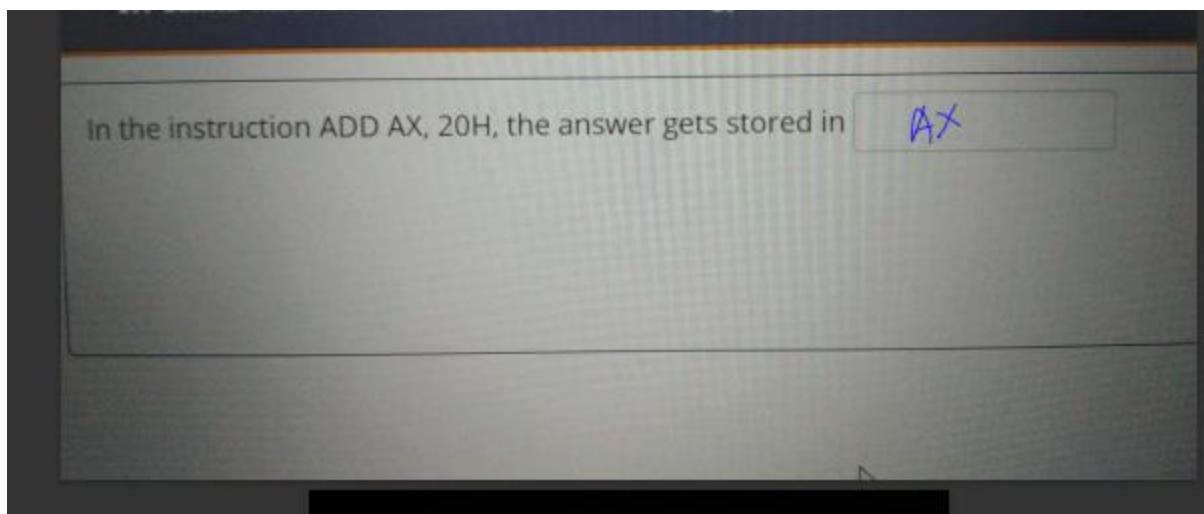
b. 28

c. 26

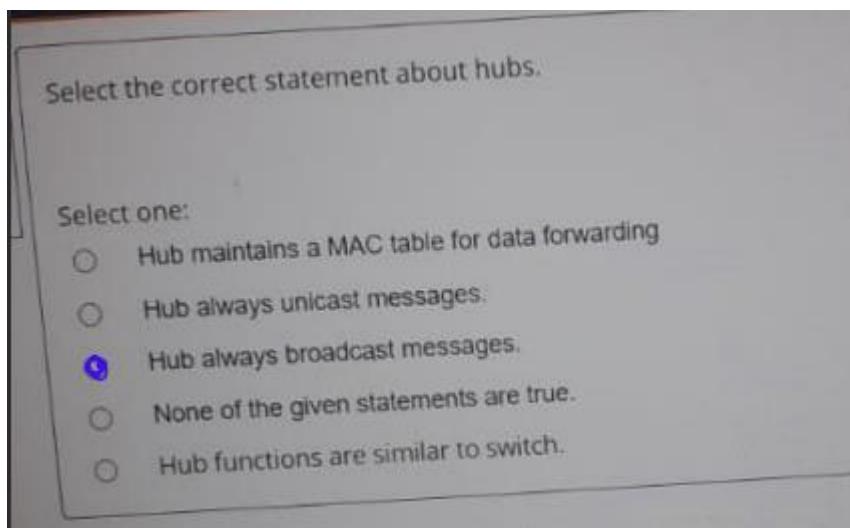
d. 30

e. 32

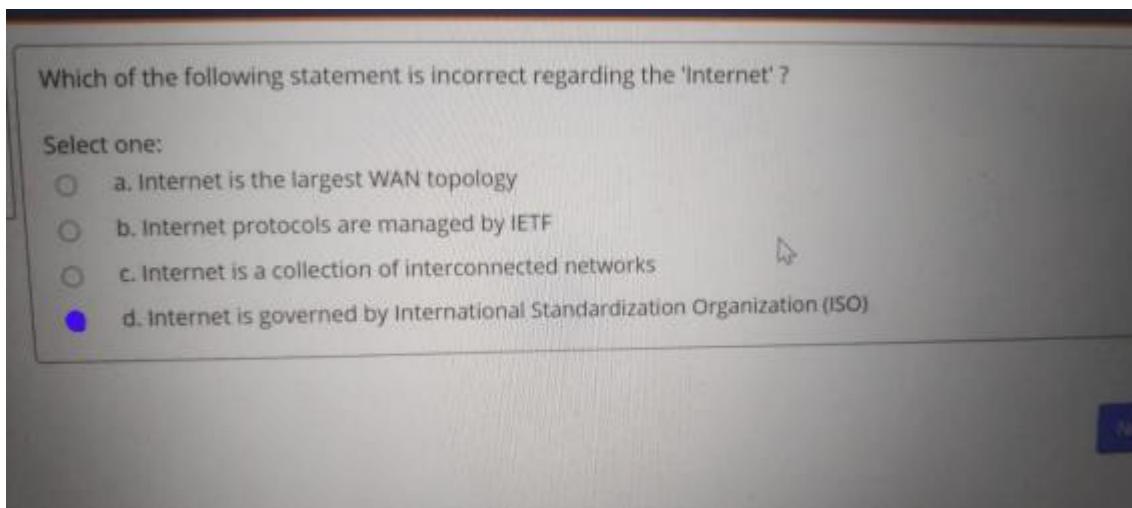
47. In the instruction ADD AX, 20H, the answer gets stored in.....



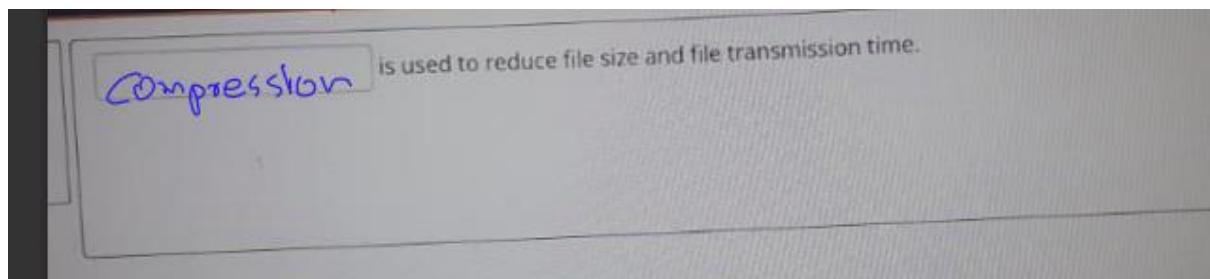
48. Select the correct statement about hubs



49. Which of the following statement is incorrect regarding the ' Internet" ?



50.is used to reduce file size and file transmission time



51. Select the correct statement

Select the correct statement.

Select one:

- If a network is directly connected to Internet, it will become a part of Internet.
- In a private network, it is mandatory to follow Internet standards.
- None of the given answers are true.
- A private network is a set of interconnected Intranets.
- A private network is not directly connected to Internet.

52. What is the size of data bus and address bus in 8086 microprocessor respectively

Select one

What is the size of data bus and address bus in 8086 microprocessor respectively

Select one:

- a. 8 bit/ 16 bit
- b. 16 bit/ 32 bit
- c. 32 bit/ 32 bit
- d. 8 bit/ 64 bit
- e. 16 bit/ 8 bit

16/20

53. What does BIU of the 8086 architecture stands for

Select one

What does BIU of the 8086 architecture stands for

Select one:

- a. Bus Interface Unit
- b. Bus Interface Union
- c. Bug Intel Unit
- d. Bus Intel Unit
- e. Bug Interface Unit

54. In what generation were the high level programming languages introduced

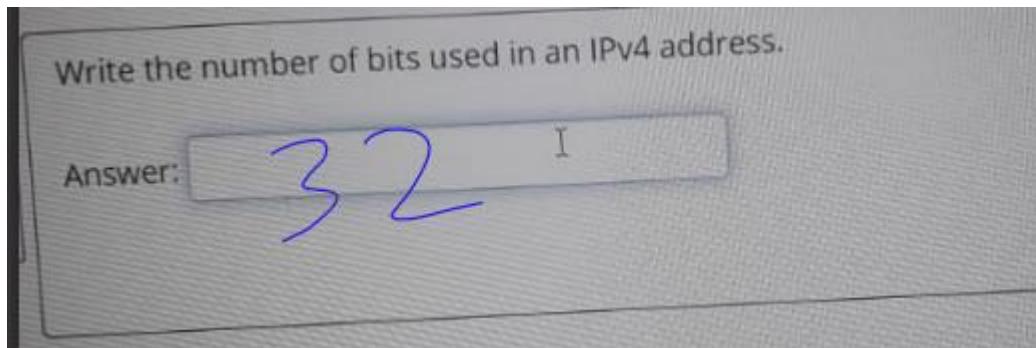
Select one

In what generation were the high level programming languages introduced

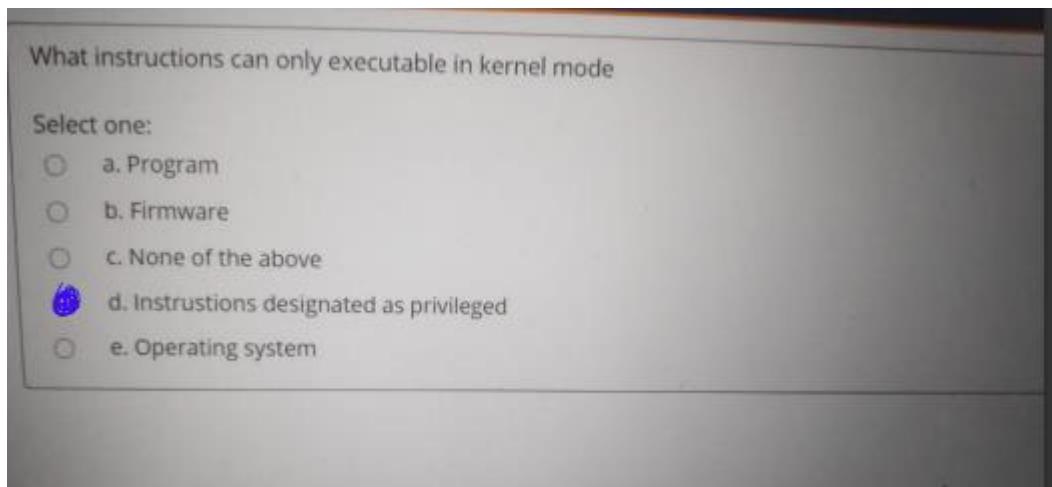
Select one:

- a. 5th generation
- b. 3rd generation
- c. 1st generation
- d. 4th generation
- e. 2nd generation

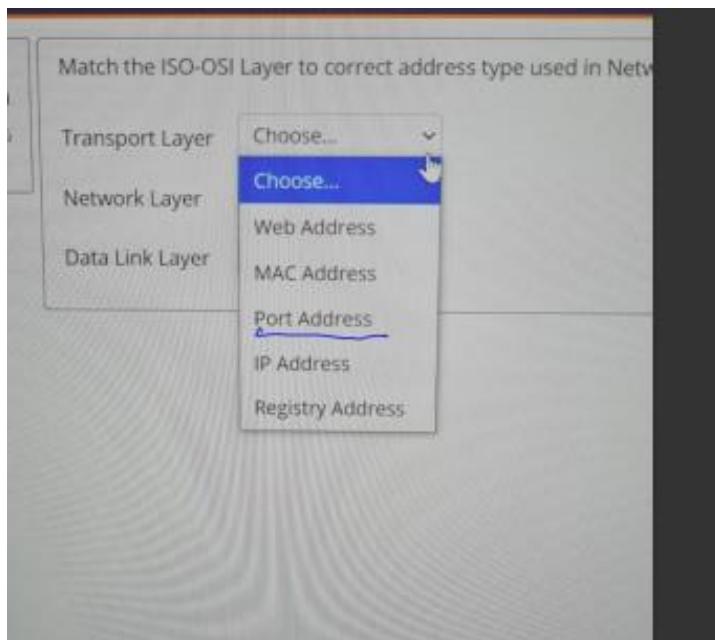
55. Write the number of bits used in an IPv4 address



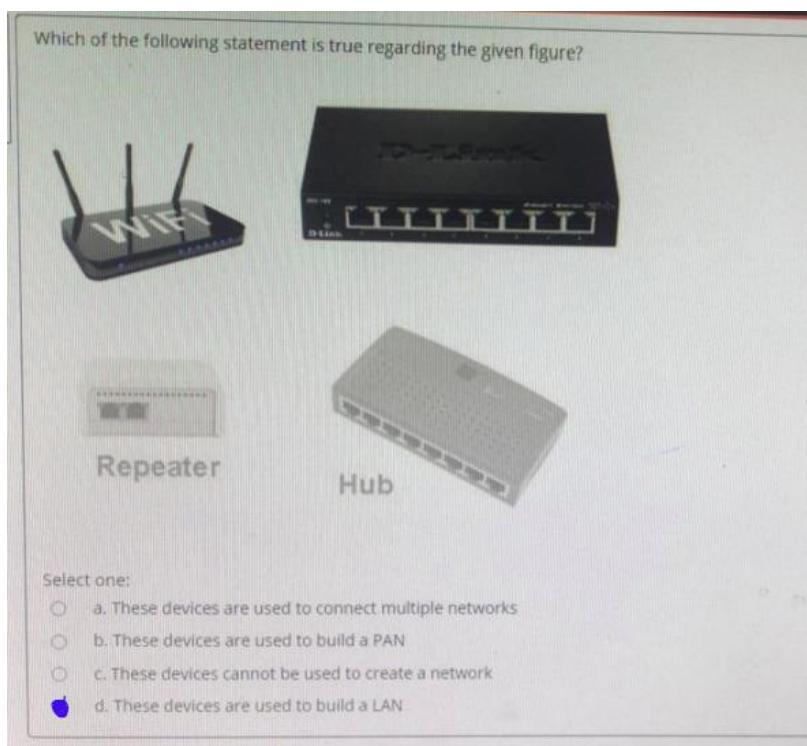
56. What instructions can only executable in kernel mode



57. Match the ISO-OSI Layer to correct address type used in Network



58. Which of the following statement is true regarding the given figure?



What is the subnet mask of the following IP address?

What is the subnet mask of the following IP address?

IP address: - 172.16.12.4

Write your answer in dotted decimal format (e.g. 192.168.10.1)

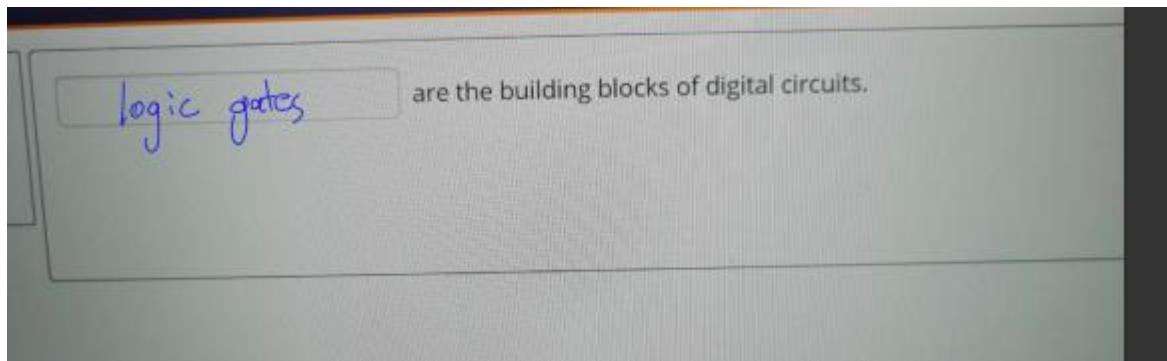
Answer: 255.255.0.0

.....is a combinational circuit that can be used for data routing and parallel to serial conversion

Multiplexer

is a combinational circuit that can be used for data routing and parallel to serial conversion.

.....are the building blocks of digital circuits



Select the statement which is not true

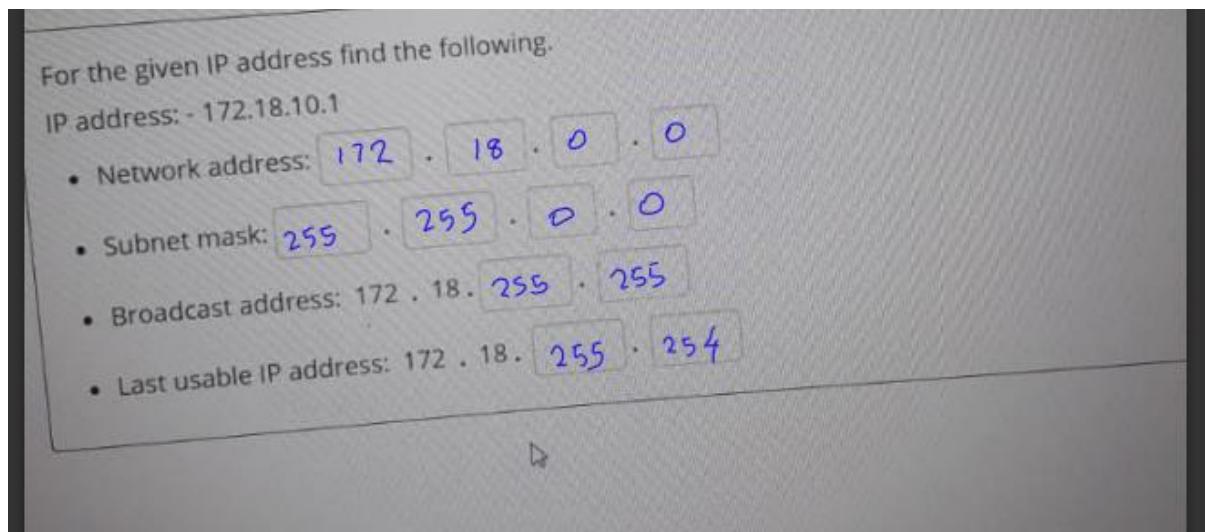
Select the statement which is not true.

Select one:

- The internet is a public network.
- The Internet is owned by Internet Society (ISOC).
- The protocols related to the Internet is defined by IETF and IRTF
- The internet architecture standards are defined by Internet Architecture Board.
- The internet is defined as a global mesh of interconnected networks

For the given IP address find the following.

IP address: 172.18.10.1



Which characteristic is not addressed by a network architecture design

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Which characteristic is not addressed by a network architecture design.

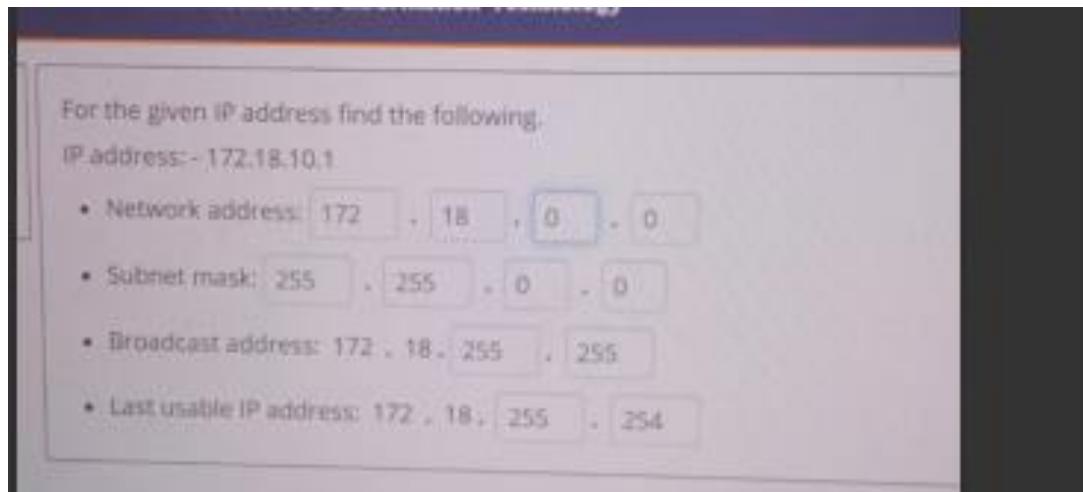
Select one:

- Durability.
- Fault Tolerance.
- Security.
- Scalability.
- Quality of Service.

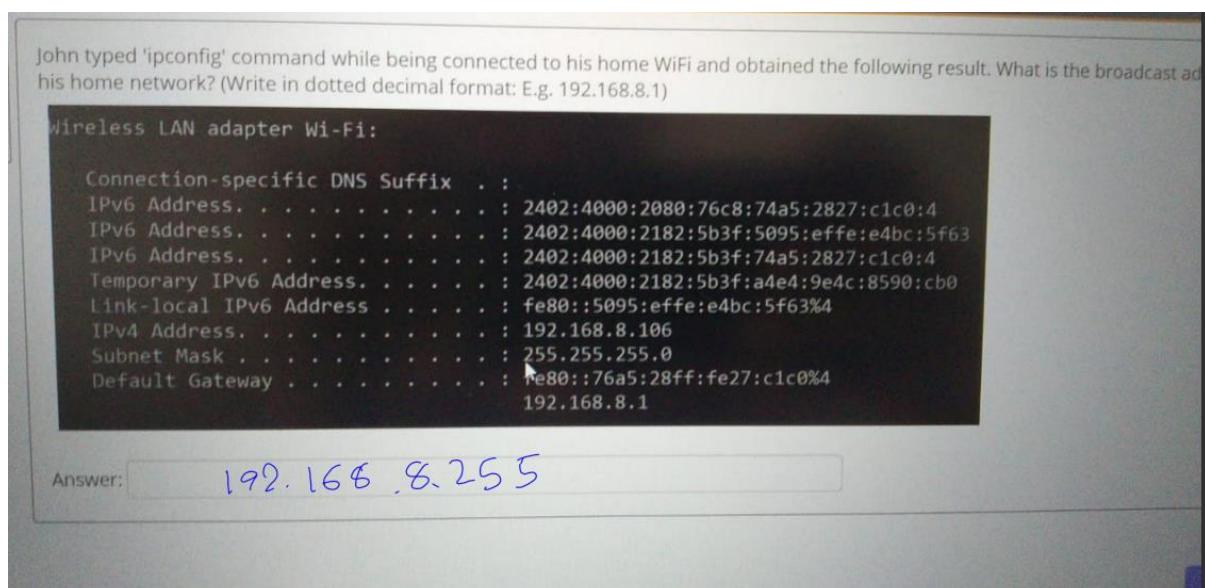
Next page

For the given IP address find the following.

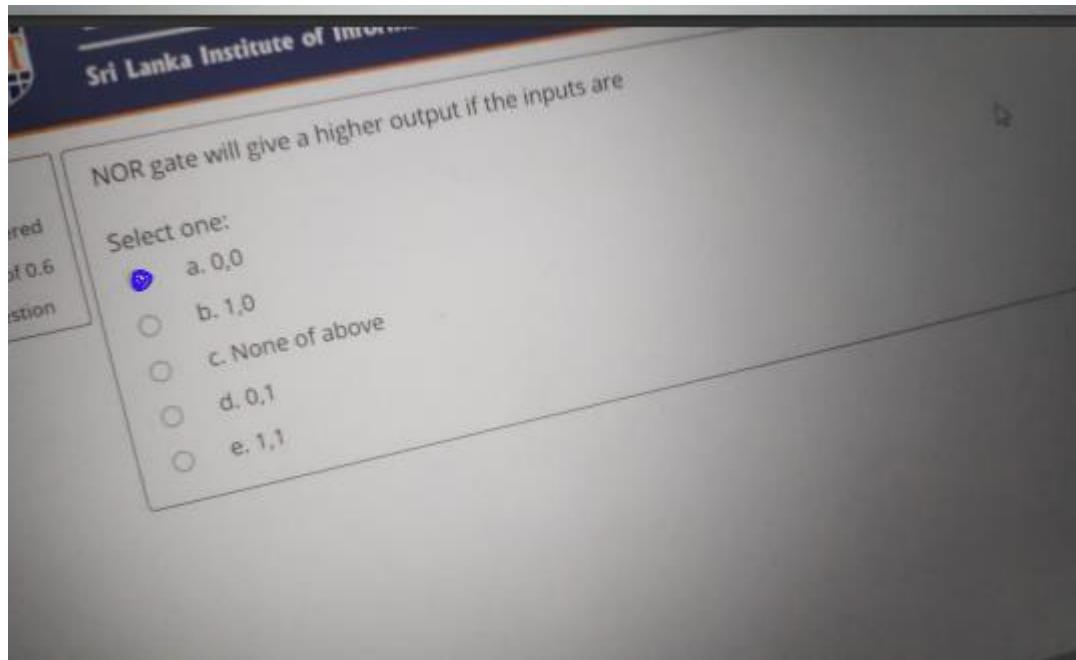
IP address: 172.18.10.1



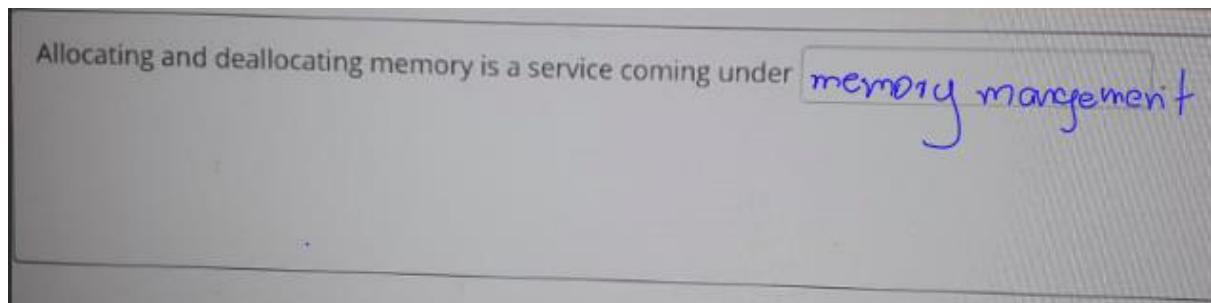
John typed 'ipconfig' command while being connected to his home Wi-Fi and obtained the following results. What is the broadcasthis home network? (write in dotted format: Eg. 192.168.8.1)



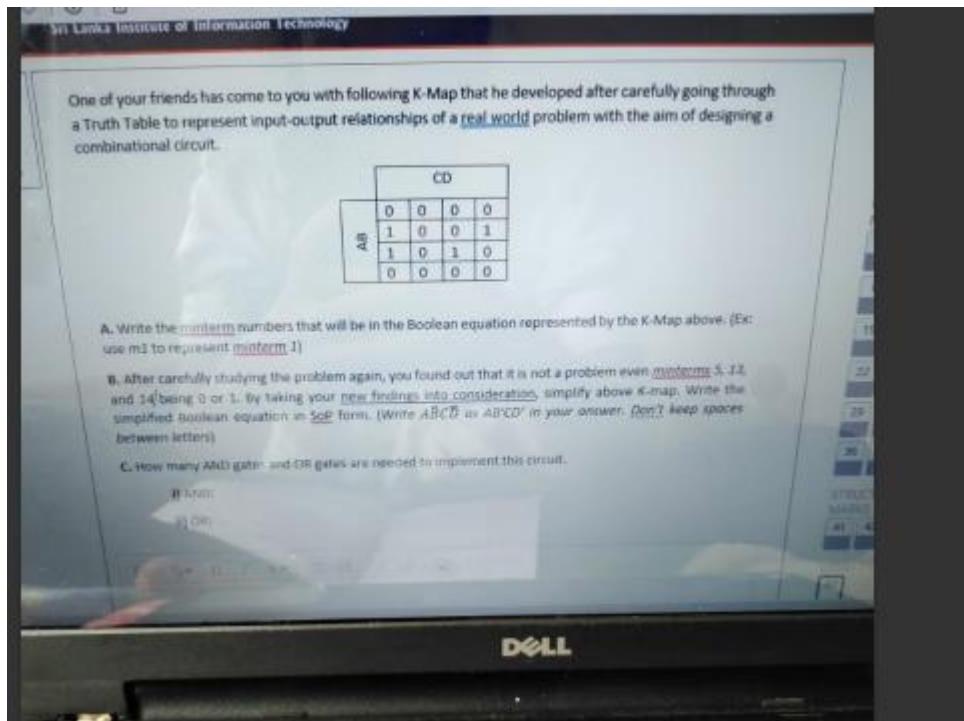
NOR gate will give a higher output if the inputs are



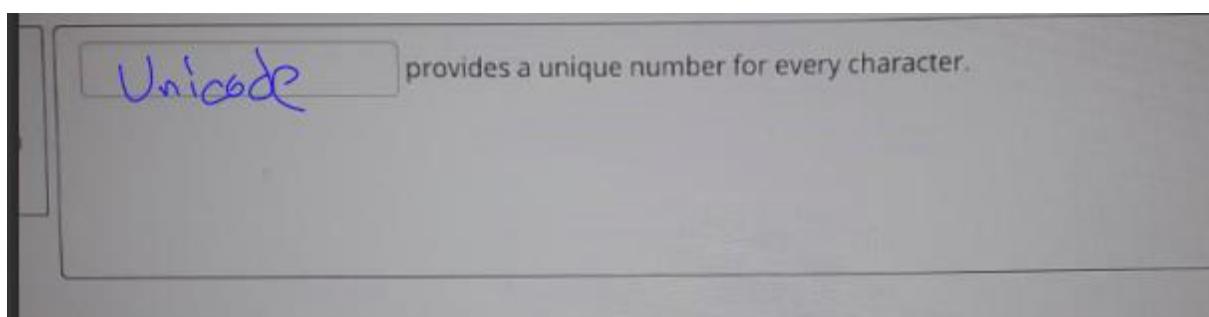
Allocating and deallocating memory is a service coming under



One of your friends has come to you with following K-Map that he developed after carefully going through a Truth table to represent input-output relationships of a real world problem with that aim of designing a combinational circuit.



..... provides a unique number for every character



For the given IP address find the following.

IP address: 172.18.10.1

For the given IP address find the following.
IP address: - 172.18.20.1

- Network address: . . .
- Subnet mask: . . .
- Broadcast address: . . .
- 32 Usable IP address: . . .
- IP Address Class: (Only type the Letter)

Complete the missing parts of the binary form of following IPv4 address:

IPv4 address: 198.168.10.1

Complete the missing parts of the binary form of following IPv4 address:
IPv4 Address: 198.168.10.1

- IPv4 Address in Binary: . . .
- How Many Hosts Can be Connected this Network:

What is the example of first generation computer

What is the example of first generation computer

Select one:

- a. UNIVAC
- b. DEC 10
- c. STAR 1000
- d. PDP 1
- e. IBM 4341

Which of the following statement is true?

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Which of the following statement is true?

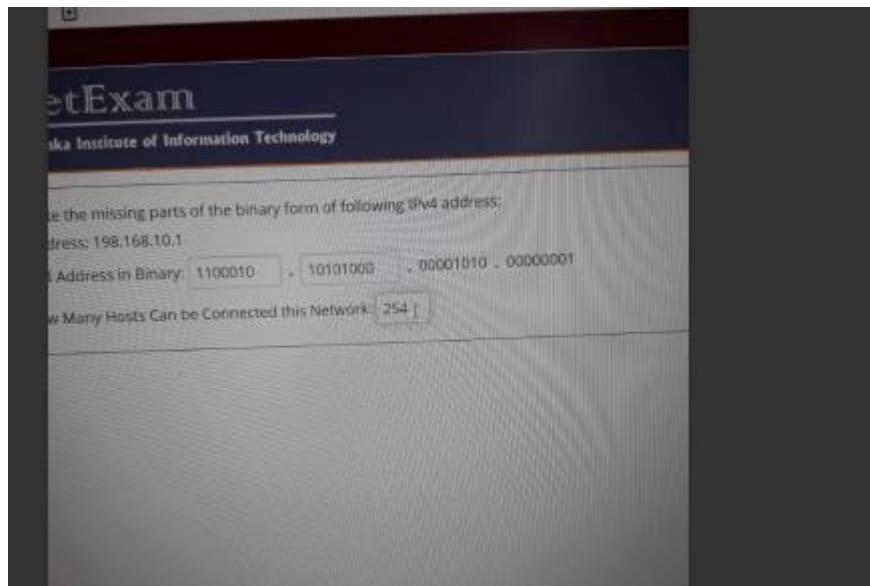
Select one:

- a. IP Address is a physical Address
- b. IP Address is a physical Address and MAC Address is a logical Address
- c. IP Address is a logical Address and MAC Address is a physical Address
- d. Both IP and MAC addresses are virtual addresses
- e. MAC Address is logical address

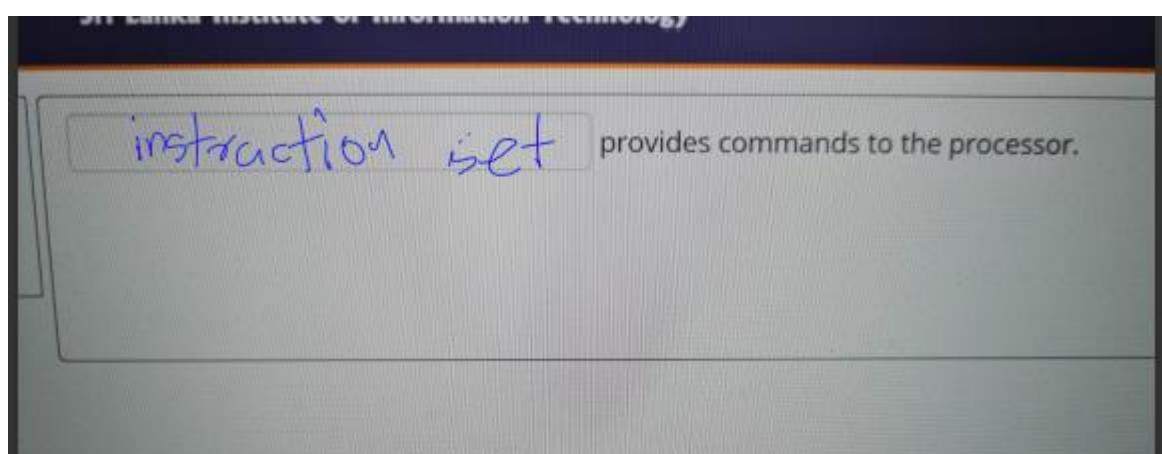
Next page 

Complete the missing parts of the binary form of following IPv4 address:

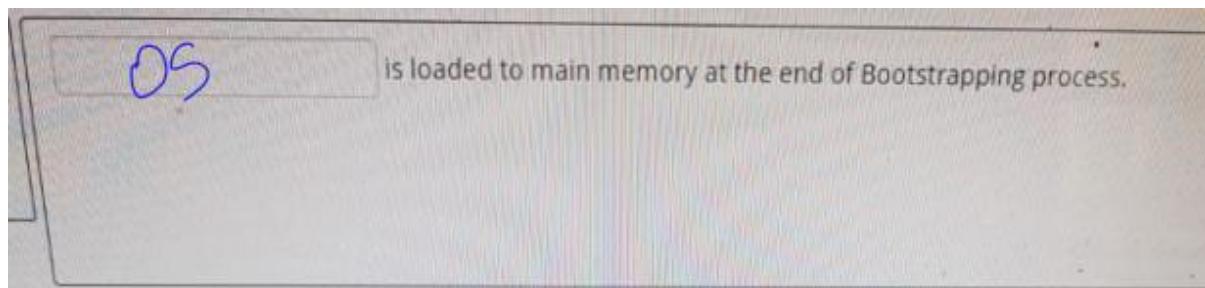
IPv4 address: 198.168.10.1



.....provides commands to the processor



..... is loaded to main memory at the end of Bootstrapping process



What is not an advantage of a computer network?

What is **not** an advantage of a computer network?

Select one:

- Remote Information Access
- Social Engineering
- Resource Sharing
- Interaction among cooperative application programs
- User Communication

Next page

One of your friends has come to you with following K-Map that they developed after carefully going through a Truth table to represent input-output relationships of a real world problem with that aim of designing a combinational circuit.

A. Write the minterm numbers that will be in the Boolean equation represented by the K-Map above. (Ex: use m_1 to represent minterm 1)

B. After carefully studying the problem again, you found out that it is not a problem even minterms 5, 12, and 14 being 0 or 1. By taking your new findings into consideration, simplify above K-map. Write the simplified Boolean equation in SOP form. (Write $ABCD$ as $AB'CD'$ in your answer. Don't keep spaces between letters)

C. How many AND gates and OR gates are needed to implement this circuit.

i) AND:
ii) OR:

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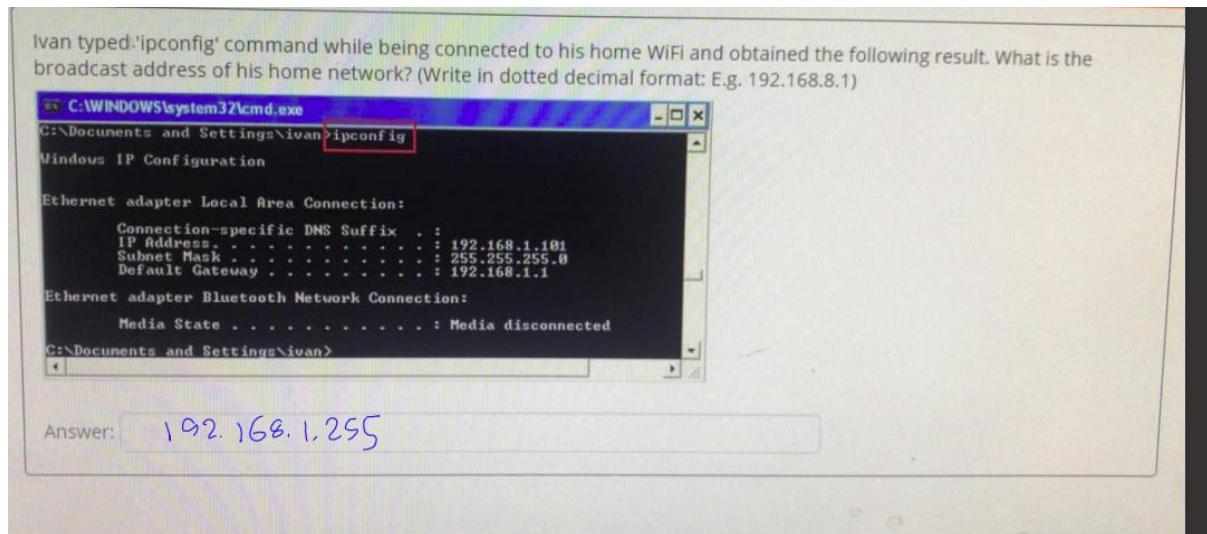
What is the service of an operating system related with providing mechanisms for deadlock handling

What is the service of an operating system related with providing mechanisms for deadlock handling

Select one:

- a. Process management
- b. Protection and security
- c. Storage management
- d. Memory management
- e. File management

Ivan typed 'ipconfig' command while being connected to his home Wi-Fi and obtained the following results. What is the broadcast address of his home network? (write in dotted format: Eg. 192.168.8.1)



Hoe many registers are found in the EU of the 8086 architecture

How many registers are found in the EU of the 8086 architecture

Select one:

- a. 4
- b. 16
- c. 3
- d. 8
- e. 6

..... is the digital circuitry within the processor that coordinates the sequence of data movements into, out of, and between the processor's sub-units.

Control Unit

is the digital circuitry within the processor that coordinates the sequence of data movements into, out of, and between the processor's sub-units.

..... provides a unique number for every character.

Unk6d

provides a unique number for every character.

Binary coded decimal for number 12 is 0001 0010. Binary coded decimal for number 45 is 0100 0101. What is the binary coded decimal for number 52.

Select one:

- a. 0101 0010
- b. 0110 0010
- c. 0101 0011
- d. 0001 0100
- e. 1101 0010

