lOMoARcPSD|20817699

# Quizzes: Chapter 01

Final CSI

The model is the basis for today’s computers.

1. Leibnitz
2. von Neumann c Pascal d Charles Babbage

In a computer, the subsystem stores data and programs.

1. ALU
2. input/output
3. memory
4. control unit

In a computer, the subsystem performs calculations and logical operations. a

ALU

1. input/output
2. memory
3. control unit

In a computer, the subsystem accepts data and programs and sends processing results to output devices.

1. ALU
2. input/output
3. memory
4. control unit

5. In a computer, the subsystem serves as a manager of the other subsystems. a

ALU

1. input/output
2. memory
3. control unit

According to the von Neumann model, are stored in memory.

a only data

b only programs

c data and programs

d neither data nor programs

A step-by-step solution to a problem is called .

a hardware

b an operating system

c a computer language

d an algorithm(một thuật toán)

FORTRAN and COBOL are examples of .

a hardware

b operating systems

c computer languages

d algorithms

A 17th-century computing machine that could perform addition and subtraction was the

.

a Pascaline

b Jacquard loom

c Analytical Engine

d Babbage machine

1. is a set of instructions in a computer language that tells the computer what to do with data.

a An operating system

b An algorithm

c A data processor

d A program

is the design and writing of a program in structured form.

1. Software engineering

b Hardware engineering

c Algorithm development

d Instructional architecture

The first electronic special-purpose computer was called . a

Pascal

1. Pascaline
2. ABC d ENIAC

One of the first computers based on the von Neumann model was called .

1. Pascal
2. Pascaline
3. ABC
4. EDVAC

The first computing machine to use the idea of storage and programming was called(ý tưởng lưu trữ và lập trình)

a the Madeline b EDVAC

c the Babbage machine d the Jacquard loom

separated the programming task from computer operation tasks.

a Algorithms b Data processors c High-level programming languages d Operating systems

# Quizzes: Chapter 02

The base of the decimal number system is .

1. 2
2. 8
3. 10
4. 16

The base of the binary number system is .

1. 2
2. 8
3. 10
4. 16

The base of the octal number system is .

1. 2
2. 8
3. 10
4. 16

The base of the hexadecimal number system is .

1. 2
2. 8
3. 10
4. 16

When converting a decimal integer to base b, we repeatedly b.

1. divide
2. multiply
3. add to
4. subtract from

When converting a binary fraction to decimal, we repeatedly .

1. divide
2. multiply
3. add to
4. subtract from

Which of the following representations is erroneous? a) (10111)2

b) (349)8

c) (3AB)16

d) 256

Which of the following representations is erroneous? a) (10211)2

b) (342)8

c) (EEE)16

d) 145

Which of the following representations is erroneous? a) (111)2

b) (346)8

c) (EEG)16

d) 221

Which of the following representations is erroneous? a) (110)2

b) (141)8

1. (EF)16
2. 22A
3. Which of the following is equivalent to 12 in decimal? a) (1110)2

b) (C)16

c) (15)8

d) None of the others

Which of the following is equivalent to 24 in decimal?

a) (11000)2==2^4+2^3

b) (1A)16

c) (31)8

d) None of the others

1. Convert the binary number 1001 to decimal. The answer is:
   1. 7
   2. 9
   3. 11
   4. 15
2. Convert the binary number 101010 to hexadecimal:
   1. 1A
   2. 1B
   3. 2A
   4. 2B
3. Convert the hexadecimal number 1B to decimal:
   1. 21 11011=1+2+2^3+2^4
   2. 23
   3. 27
   4. 29

# Quizzes: Chapter 3

1. A byte consists of bits. a 2 b 4 c 8 d 16
2. In a set of 64 symbols, each symbol requires a bit pattern length of bits.

a 4 b 5 c 6 d 7 log2(64)=6

1. How many symbols can be represented by a bit pattern with ten bits?

a 128 b

256 c

512 d

1024

1. If the ASCII code for E is 1000101, then the ASCII code for e is . Answer the question without consulting the ASCII table.

a 1000110 b

1000111 c

0000110 d

1100101

1. A 32-bit code called represents symbols in all languages. a

ANSI

1. Unicode
2. EBCDIC
3. Extended ASCII
4. An image can be represented in a computer using the method.

a bitmap graphic b

vector graphic

1. only
2. either bitmap or vector graphic
3. In the graphic method of representing an image in a computer, each pixel is assigned a bit patterns.

a bitmap b vector c quantized d binary

1. In the graphic method of representing an image in a computer, the image isdecomposed into a combination of geometrical figures.

a bitmap

b vector

c quantized

d binary

1. In the graphic method of representing an image in a computer, re-scaling ofthe image creates a ragged or grainy image.

a bitmap

b vector

c quantized

d binary

1. Assume a new Excess system uses 17 bits to represent the exponent section. What is he bias value in this system?

a 17

b 16

c 65535 2^(17-1) - 1 = 2^16 - 1 = 65,535

d 65536

1. Which number representation method is often used to store the exponential(số mũ) value of a fractional part?(pp nào thường được sd để lưu gtri hàm mũ của một phân số)

a unsigned integers

b two’s complement

c Excess

d ten’s complement

1. In an Excess conversion, we the number to be converted.

a add the bias number to

b the bias number from

c multiply the bias number by

d divide

1. When a fractional part is normalized(phân số đc chuẩn hóa), the computer stores the .

a only the sign

b only the exponent

c only the mantissa

d the sign, exponent, and mantissa

1. The precision of the fractional (phân số)part of a number stored in a computer is defined by the

. (độ chính xác của phân số)

a sign

b exponent

c mantissa

d last digit

1. The combination of sign and mantissa of a real number in IEEE standard floating point format is stored as an integer in the representation.

a unsigned

b sign- and-magnitude

c two’s complement

d one’s complement

# Quizzes: Chapter 04

is an arithmetic operation. (phép toán học)

a The exclusive OR b The unary NOT c Subtraction d The binary AND

is a logical bit operator.

a The exclusive OR b The unary NOT c The binary AND d exclusive OR, unary NOT, or binary AND

The method of integer representation is the most common method for storing integers in computer memory.(pp biểu diễn số nguyên)

a sign-and-magnitude b one’s complement c two’s complement d unsigned integers

In two’s complement addition, if there is a final carry after the left most column addition, .

a add it to the right most column b

add it to the left most column

c discard it d increase the bit length

5. For an 8-bit allocation, the smallest decimal number that can be represented in two’s complement form is .

a -8 b

-127 c

-128 d -2^(n-1) đến 2^(n-1) - 1,

-256

For an 8-bit allocation, the largest decimal number that can be represented in two’s complement form is \_ .

a 8

b 127 c 128 d 256

In two’s complement representation with a 4-bit allocation, we get when we add 1 to 7.

a 8

1

c -7 d

-8 0111+0001

In two’s complement representation with a 4-bit allocation, we get when we add 5 to 5.

a -5 b

-6 c -

7 d 10

9. If the exponent in Excess\_127 is binary 10000101, the exponent in decimal is

.

a 6 b 10000101=133

133-127=6

7 c 8

d 9

If we are adding two numbers, one of which has an exponent value of 7 and the other an expon ent value of 9, we need to shift the decimal point of the smaller number

.

a one place to the left b one place to the right c two places to the left d two places to the right

operator (s) takes two inputs to produce one output. a

Only AND b Only OR c Only XOR d AND, OR, or XOR

The unary operator inverts its single input.

1. AND
2. OR c NOT d XOR

13. operator (s), if the input is two 0s, the output is

0. a In only AND b In only OR c In only XOR d In AND, OR, or XOR

operator (s), if the input is two 1s, the output is 0. a In only AND b In only OR c In only XOR d In AND, OR, or XOR

For the binary AND operation, only an input of gives an output of 1. a

two 0s b two 1s c one 0 and one 1 d two 2s

For the binary OR operation, only an input of gives an output of 0. a

two 0s b two 1s c one 0 and one 1 d two 2s

We use a bit pattern called a to modify another bit pattern. a

mask b carry c float d byte

To flip(lật) all the bits of a bit pattern, make a mask of all 1s and then the bit pattern and the mask.

1. AND
2. OR c XOR d NOT

To un-set (force to 0) all the bits of a bit pattern, make a mask of all 0s and then

the bit pattern and the mask.

1. AND
2. OR c XOR d NOT

To set (force to 1) all the bits of a bit pattern, make a mask of all 1s and then the bit pattern and the mask.

1. AND
2. OR c XOR d NOT

# Quizzes: Chapter 05

* 1. The TCP/IP model has layers. a.five
  2. ix c.seven d.eight
  3. The layer of the TCP/IP protocol suite provides services for end users. a.data- link
  4. ransport c.application dphysical
* The layer of the TCP/IP protocol suite transmits a bit stream over a physical medium.
* physical
* data-link\* network
* transport
* The layer of the TCP/IP protocol suite is responsible for node-to-node delivery of a frame between two adjacent nodes.
* transport\* network
* data-link
* session

The layer of the TCP/IP protocol suite is responsible for source-todestination delivery of the entire message.

* transport\* network
* data-link
* session
* What is the domain name in the e-mail address [*kayla@nasa.gov*?](mailto:kayla@nasa.gov)
* kayla
* [kayla@nasa.gov](mailto:kayla@nasa.gov)
* nasa.gov
* gov

\*

Which physical topology uses a hub or switch?

* bus
* ring
* star
* bus and ring
* IP addresses are currently bits in length.

\* 4

\* 8

\* 32

\* 40

* protocol (s) is one of the protocols in the transport layer.
* Only TCP
* Only UDP
* Only SCTP
* TCP, UDP, and SCTP
* is a protocol for file transfer.
* FTP
* SMTP
* TELNET\* HTTP
* is a protocol for e-mail services.
* FTP
* SMTP
* TELNET\* HTTP
* is a protocol for accessing and transferring documents on th[e WWW.](http://WWW/)
* FTP
* SMTP
* TELNET
* HTTP

1. Every computer looking to access the Internet would be known as this client

\*

* + desktop
  + hub
  + server

1. Identifies company or commercial sites
   * .org
   * .com
   * .gov
   * .edu
2. what is indicated when the domain name has only two letters like .us, .uk, .au, .mx, or

.ca

* + invalid domain
  + private domain
  + secure domain
  + country domain

# Quizzes: Chapter 06

* + is a program that facilitates the execution of other programs.
  + An operating system
  + Hardware
  + A queue
  + An application program
  + supervises the activity of each component in a computer system.
  + An operating system
  + Hardware
  + A queue
  + An application program
  + Multi-programming requires a operating-system.
  + batch
  + time-sharing
  + parallel
  + distributed

is multi-programming with swapping.

\*

* + Partitioning
  + Paging
  + Demand paging- phân trang \* Queuing

 is multi-programming without swapping.

* + Partitioning-phân vùng
  + Virtual memory\* Demand paging \* Queuing
  + In , only one program can reside in memory for execution.
  + mono-programming
  + multi-programming
  + partitioning
  + paging
  + is a multi-programming method in which multiple programs are entirely in memory with each program occupying a contiguous space. \* Partitioning
  + Paging
  + Demand paging
  + Demand segmentation
  + In paging, a program is divided into equally sized sections called .
  + pages
  + frames
  + segments
  + partitions
  + In , the program can be divided into differently sized sections. \* partitioning
  + paging
  + demand paging
  + demand segmentation phân khúc nhu cầu
  + In , the program can be divided into equally sized sections called pages, but the pages need not be in memory at the same time for execution.
* partitioning
* paging
* demand paging
* demand segmentation
* A process in the state can go to either the ready, terminated, or waiting states.
* hold
* virtual
* running
* hold or running
* A process in the ready state goes to the running state when .
* it enters memory
* it requests I/O
* it gets access to the CPU
* it finishes running
* A program becomes a when it is selected by the operating system and brought to the hold state.
* job
* process
* deadlock\* partition

Every process is .

* + only a job
  + only a program\* only a partition
  + a job and a program
  + The scheduler creates a process from a job and changes a process back to a job.
  + job
  + process
  + virtual\* queue
  + The scheduler moves a process from one process state to another.
  + job
  + process
  + virtual\* queue
  + To prevent , an operating system can put resource restrictions on processes. \* starvation
  + synchronization
  + paging
  + deadlock

 can occur if a process has too many resource restrictions.hạn chế

* + Starvation ít
  + Synchronization
  + Paging
  + Deadlock
  + The manager is responsible for archiving and backup.
  + memory
  + process
  + device\* file
  + The manager is responsible for access to I/O devices.
  + memory
  + process
  + device
  + file

# Quizzes: Chapter 07

* + is a step-by-step method for solving a problem or doing a task.
  + A construct
  + A recursion
  + An iteration
  + An algorithm
  + There are basic constructs in computer -science.
  + one
  + two
  + three \* four
  + The construct tests a condition.
  + sequence
  + decision
  + repetition\* flow
  + The construct uses a set of actions one after another.
  + sequence
  + decision
  + repetition\* flow

The construct handles repeated actions.

* + sequence
  + decision
  + repetition \* flow
  + is a pictorial representation of an algorithm.
  + A UML diagram
  + A program
  + Pseudocode
  + An algorithm
  + is an English-language-like representation of code.
  + A UML diagram
  + A program
  + Pseudocode
  + An algorithm
  + is a basic algorithm that adds a list of numbers.
  + Summation
  + Product
  + Smallest
  + Largest
  + is a basic algorithm that multiplies a list of numbers.
  + Summation
  + Product
  + Smallest\* Largest
  + is a basic algorithm that arranges data according to its value.
  + Inquiry\* Sorting
  + Searching
  + Recursion
  + The items are divided into two lists (sorted and unsorted) sort.
  + only in a selection
  + only in a bubble
  + only in an insertion
  + in selection, bubble, or insertion
  + In sort, the item that goes into the sorted list is always the first item in the unsorted list.
  + selection
  + bubble
  + insertion
  + every
  + In sort, the smallest item from the unsorted list is swapped with the item at the beginning of the unsorted list.
  + selection
  + bubble
  + insertion
  + every

In sort, the smallest item moves to the beginning of the unsorted list. There is no one-to-one swapping.

* + selection\* bubble
  + insertion
  + every
  + is a basic algorithm in which we want to find the location of a target in a list of items.
  + Sorting
  + Searching
  + Product
  + Summation
  + We use a search for an unordered list.
  + sequential
  + binary
  + bubble
  + insertion
  + We use a search for an ordered list.
  + sequential
  + binary
  + bubble
  + insertion

 is a process in which an algorithm calls itself.

* + Insertion
  + Searching
  + Recursion
  + Iteration

1. What is a linear search?
   * A sequential method for sorting elements within a list.
   * A sequential method for sorting and finding an element within a list.
   * A sequential method for finding an element within a list. \* A sequential method that reduces the size of a list.
2. How many checks will a linear search take to find number 6 in the list?3, 4, 7, 6, 5, 1

\* 3

\* 7

\* 5

\* 4

# Chapter 08: Quizzes

The only language understood by computer hardware is a language. a

machine b symbolic c high-level d natural

C, C++, and Java can be classified as languages. a

machine b symbolic c high-level d natural

FORTRAN is a(n) language.

a procedural b functional c declarative d object-oriented

Pascal is a(n) language.

a procedural b functional c declarative d object-oriented

Java is a(n) language.

a procedural b functional c declarative d object-oriented LISP is a(n)

language.

a procedural b functional c declarative d object-oriented

is a common language in the business -environment.

1. FORTRAN
2. C++ c C

d COBOL

is a popular object-oriented language.

a FORTRAN b

COBOL

c Java d

LISP

9. A program can be either an application or an applet.

1. FORTRAN
2. C++ c C

d Java

10 LISP and Scheme are both languages.

a procedural b

functional c

declarative d object-oriented *Chapter 9:*

# Quizzes

One phase in system development is .

a analysis b application c designing d collecting

Defining the users, requirements, and methods is part of the phase.

a analysis b design c implementation d testing

In the system development process, writing the program is part of the phase.

a analysis b design c implementation(thực hiện) d testing

In the system development process, structure charts(biểu đồ) are tools used in the phase.

a analysis b design c implementation d testing

1. Testing a software system can involve testing.

a black-box b

glass-box

c neither black-box nor glass-box d

both black-box and glass-box

is the breaking up of a large project into smaller parts.(chia nhỏ dự án) a

Coupling b Incrementing c Obsolescence d Modularization

is a measure of(thước đo) how tightly two modules are bound to each other.

1. Modularity
2. Coupling
3. Interoperability
4. Cohesion
   1. between modules in a software system must be maximized.
5. Coupling
6. Cohesion: gắn kết
7. Neither coupling nor cohesion d Both coupling and cohesion
   1. What is the waterfall model?

a A phase cannot be started until the previous phase is completed(k thể bắt đầu trc khi giai đoạn trc nó dc hoàn thành) b

A phase can be started until the previous phase is completed

c The development phase begins simultaneously d

The development process starts at the design phase

# Quizzes: Chapter 10

1. A data structure can be .

* only an array
* only a record
* only a linked list
* an array, a record, or a linked list

1. An array that consists of just rows and columns is a array.

* one-dimensional
* two-dimensional
* three-dimensional
* multidimensional

1. Each element in a record is called .

* a variable
* an index
* a field
* a node

1. All the members of a record must be .

* the same type
* related types
* integer type
* character type

1. is an ordered collection of data in which each element contains the location of the next element.

* An array
* A record
* A linked list
* A file

1. In a linked list, each element contains .

* only data
* only a link
* neither data nor a link
* data and a link

1. The is a pointer that identifies the next element in the linked list.

* link
* node
* array
* data

1. Given a linked list called *children,* the pointer variable *children* identifies element of the linked list.

* the first
* the second
* the last
* any

1. An empty linked list consists of .

* a node
* two nodes
* data and a link



* a null head pointer

1. To traverse a list, you need a pointer.

* null
* walking
* beginning
* insertion

# Quizzes: Chapter 11

* 1. In an abstract(trừu tượng) data type, . 

the ADT implementation is known  the ADT implementation is hidden

* the ADT public operations are hidden
* Nothing is hidden
  1. A stack is a structure.
* FIFO  LIFO
* DIFO
* SIFO
  1. A(n) list is also known as a queue.(hàng đợi)
* LIFO
* FIFO
* unordered
* ordered
  1. If A is the first data element input into a stack, followed by B, C, and D, then is the first element to be removed.
* A
* B
* C
* D
  1. If A is the first data element input into a queue, followed by B, C, and D, then is the first element to be removed.
* A
* B
* C
* D
  1. The pop operation of the stack.
* deletes an item from the top
* deletes an item from the bottom
* inserts an item at the top
* inserts an item at the bottom
  1. The push operation of the stack.
* deletes an item from the top
* deletes an item from the bottom
* inserts an item at the top
* inserts an item at the bottom
  1. In a binary tree, each node has two subtrees.
* more than
* less than
* at most
* at least
  1. In preorder traversal of a binary tree, the .
* left subtree is processed first
* right subtree is processed first
* root is processed first
* the root is never processed
  1. In traversal of a binary tree, the right subtree is processed last.
* preorder
* inorder
* postorder
* any order
  1. In postorder traversal of a binary tree, the root is processed .
* first
* second
* last
* after the left subtree
  1. In postorder traversal of a binary tree, the left subtree is processed .
* first
* second
* last
* after the right subtree
  1. In traversal of a binary tree, the left subtree is processed last.
* preorder
* inorder
* postorder
* out of order
  1. In an inorder traversal of a binary tree, the root is processed .
* first
* second
* last
* two times
  1. What is a full binary tree?
* Each node has exactly zero or two children
* Each node has exactly two children
* All the leaves are at the same level
* Each node has exactly one or two children

# Quizzes: Chapter 12

* + 1. file can be accessed randomly.
* A sequential
* An indexed
* A hashed
* Any
  + 1. file can be accessed sequentially.
* A sequential
* An indexed
* A hashed
* No
  + 1. When a sequential file is updated, the file gets the actual update.
* new master
* old master
* transaction
* error report
  + 1. When a sequential file is updated, the file contains a list of all errors occurring during the update process.
* new master
* old master
* transaction
* error report
  + 1. When a sequential file is updated, the file contains the changes to be applied.
* new master
* old master
* transaction(giao dịch)
* error report
  + 1. After a sequential file is updated, the file contains the most current(hiện tại) data.
* new master
* old master
* transaction
* error report
  + 1. If the transaction file key is 20 and the first master file key is 25, then we .
* add the new record to the new master file
* revise the contents of the old master file
* delete the data
* write the old master file record to the new master file
  + 1. If the transaction file key is 20 with a delete code and the master file key is 20, then we

.

* add the transaction to the new master file
* revise the contents of the old master file
* delete the data
* write the old master file record to the new master file
  + 1. An indexed file consists of .
* only a sequential data file
* only an index
* only a random data file
* an index and random data file
  + 1. The index of4manytcphas fields.
* two
* three
* four
* any number of
  + 1. In the hashing method, selected digits are extracted from the key and used as the address.
* direct
* division remainder
* modulo division
* digit extraction
  + 1. In the hashing method, the key is divided by the file size, and the address is the remainder plus 1.
* direct
* modulo division
* division remainder
* digit extraction
  + 1. In the hashing method, there are no synonyms or collisions.
* direct
* modulo division
* division remainder
* digit extraction
  + 1. are keys that hash to the same location in the data file.
* Collisions
* Buckets
* Synonyms
* Linked lists
  + 1. When a hashing algorithm produces an address for an insertion key and that address is already occupied(bị chiếm), it is called a .
* Collision(va chạm)
* probe
* synonym
* linked list
  + 1. The address produced by a hashing algorithm is the address.
* probe
* synonym
* collision
* home
  + 1. The area is the file area that contains all the home addresses.
* probe
* linked
* hash
* prime
  + 1. In the collision resolution method, we try to put data that cannot be placed in location 123 into location 124.
* open addressing
* linked list
* bucket hashing
* random hashing
  + 1. Which one of the following explains the sequential file access method?
* random access according to the given byte number
* read bytes one at a time, in order
* read/write sequentially by record
* read/write randomly by record
  + 1. The data structure used for file directory is called
* mount table
* hash table
* file table
* process table

# Quizzes: Chapter 13

* + - 1. In a three-level DBMS architecture, the layer that interacts directly with the hardware is the level.
* external
* conceptual
* internal(bên trong)
* physical
  + - 1. In a three-level DBMS architecture, the level determines where data is actually stored on the storage devices.
* external
* conceptual
* internal
* physical
  + - 1. The level of a three-level DBMS architecture defines the logical view of the data.
* external
* conceptual
* internal
* physical
  + - 1. The data model and the schema of a DBMS are often defined at the level. external
* conceptual
* internal
* physical
  + - 1. In a three-level DBMS architecture, the level interacts directly with the users.
* external
* conceptual
* internal
* physical
  + - 1. Of the various database models, the model is the most prevalent today.
* hierarchical
* network
* relational (quan hệ)
* linked list
  + - 1. Each column in a relation is called .
* an attribute (thuộc tính)
* a tuple
* a union
* an attitude
  + - 1. Each row in a relation is called .
* an attribute
* a tuple
* a union
* an attitude

9.A unary operator is applied to relation(s) and creates an output of relation(s).

* one, one
* one, two  two, one
* two, two

10.A binary operator is applied to relations (s) and creates an output of

relation(s).

* one, one
* one, two  two, one
* two, two

1. The unary operation always results in a relation(mqh) that has exactly one more row than the original relation.

* insert
* delete
* update
* select

1. If you want to change the value of an attribute of a tuple, you use the operation.

* project
* join
* update
* select

1. The operation that takes two relations and combines them based on common attributes is the operation.

* join
* project
* union
* intersection

1. If you need to delete an attribute in a relation, you can use the operation.

* join
* project
* union
* intersection

1. You want to create a relation called New that contains tuples that belong to both relation A and relation B. For this, you can use the operation.

* select  union
* project
* intersection(quan hệ)

1. Which of the following is a unary operator?

* intersection
* union
* join
* project

1. Which of the following is a binary operator?

* select
* update
* difference
* all of the above

1. is a declarative language used on relational databases.

* PDQ
* SQL
* LES
* PBJ

1. Given the basic ER and relational models, which of the following is INCORRECT?

* An attribute of an entity can have more than one value
* An attribute of an entity can be composite
* In a row of a relational table, an attribute can have more than one value
* In a row of a relational table, an attribute can have exactly one value or a NULL value.

1. Which SQL statement is used to extract data from a database?

* Select
* Get
* Extract
* Open

# Quizzes: Chapter 14

* 1. Data is compressed using a dictionary with indexes to strings. This is .
     + Huffman encoding
     + Lempel Ziv encoding
     + Morse coding
     + lossy coding
  2. string of one hundred 0s is replaced by two markers, a 0, and the number 100. This is

.

* + - run-length encoding mã hóa đọ chạy dài
    - Morse coding
    - Huffman encoding
    - Lempel Ziv encoding

1. is an example of lossy compression.
   * Huffman encoding
   * Lempel Ziv encoding
   * Run-length encoding
   * JPEG
2. In a data compression method, the received data is an exact copy of the original message.
   * lossless
   * lossy
   * JPEG
   * MPEG
3. data compression method, the received data need not be an exact copy of the original message.
   * Only in MP3
   * Only in JPEG
   * Only in MPEG
   * In MP3, JPEG, or MPEG
4. encoding is a lossless data compression method.
   * Only Huffman
   * Only Run-length
   * Only LZ
   * Huffman, run-length, or LZ
5. In encoding, the more frequently occurring characters have shorter codes than the less frequently occurring characters.
   * Huffman
   * run-length
   * LZ
   * JPEG
6. In encoding, PPPPPPPPPPPPPPP can be replaced by P15.
   * Huffman
   * run-length
   * LZ
   * MPEG
7. LZ encoding requires .
   * only a dictionary
   * only a buffer
   * only an algorithm
   * a dictionary, a buffer, and an algorithm
8. JPEG encoding involves , a process that reveals the redundancies in a block.
   * blocking
   * the discrete cosine transform
   * quantization
   * vectorization
9. In JPEG encoding, the process breaks the original picture into smaller blocks and assigns a value to each pixel in a block.
   * blocking
   * DCT
   * quantization
   * vectorization
10. The last step in JPEG, , removes redundancies.
    * blocking
    * quantization
    * compression
    * vectorization
11. is a lossy compression method for pictures and graphics, whereas is a lossy compression method for video.
    * DCT, MPEG
    * MPEG, JPEG
    * JPEG, MPEG
    * JPEG, DCT
12. What is compression?
    * To convert one file to another
    * To reduce the size of data to save space
    * To minimize the time taken for a file to be downloaded
    * To compress something by pressing it very hard
13. Which of these terms is a type of data compression?
    * resolution
    * zipping
    * inputting
    * caching