Hughe

What is max. no. of hops in hypercube n/w with n (=2 ^ p) to go from one node to another ?

   a. p

   b. log p

   c. n ^ 2

What is Kerberos ?   ans. Authentication Protocol.

In completely connected multiprocessor system with n processors , links will be of the order of

   a. O(n ^ 2)

   b. O(2 ^ n)

   c. O(n/2)

When quick sort gives worst performance ?   ans. When elements are in order

o/p of each sorting step of 8 elements was given and had to recognise which sorting algo.?

   Ans. Bubble sort (Not Sure , Check it out)
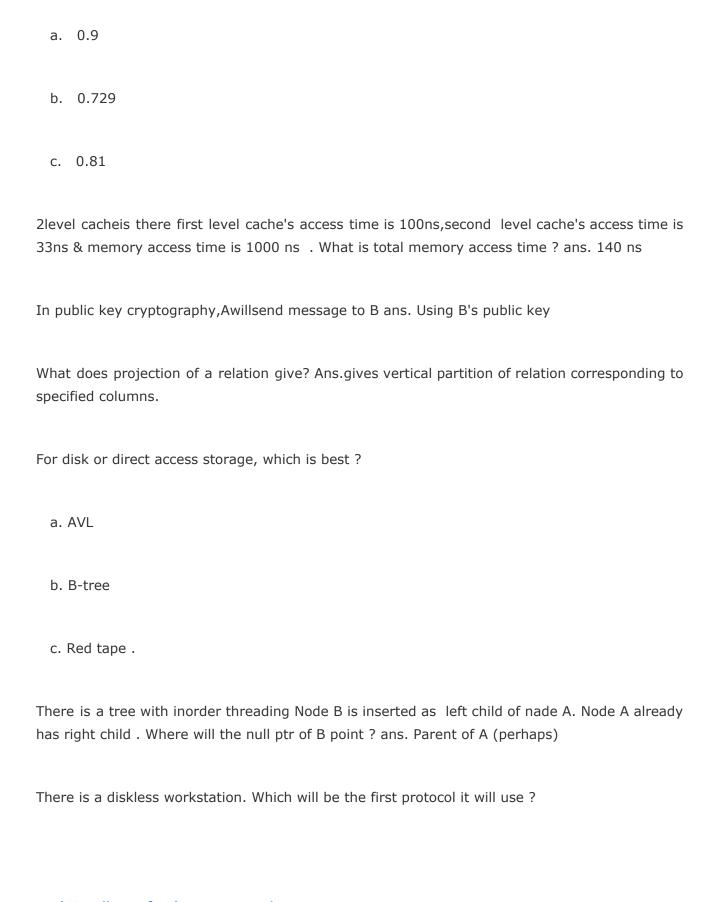
In worst case ,which sort is best out of following sorts?

    a. heap

    b. selection

    c. quick (ans.)

    d. insertion

hree very simple gate circuits each having inputs A,B,C,D were given and had to tell ,which two give same result ? (DeMorgan's Law was used in solving) Ans was (a) &(c) (o/p of a & c was coming to be AB +CD)

K-map given,had to tell simplified function Ans was perhaps AB+AD +AC+BCD

K-Map was CD`

  AB 0 0 0 0

  0 0 1 0

  1 1 1 1

  0 1 1 1

What is Function Point ? Ans. S/W estimation technique

p points to an integer. We don't want p to change value. In C, what declarations will we use?

  A const int *p

  b. int *p

  c. int const *p

  e. int* const p (perhaps ans.)

Diff between 2NF &3NF ? Ans. D (last option)

Which does not use client server model ?

  a. Email

  b. Web access

  c. C. Telephone call

  d. N/w file system

In a pipeline having 3 stages, each having reliability of 0.9 ,what is overall reliability of pipeline?

a. 0.9

b. 0.729

c. 0.81

2level cacheis there first level cache's access time is 100ns,second level cache's access time is 33ns & memory access time is 1000 ns . What is total memory access time ? ans. 140 ns

In public key cryptography,Awillsend message to B ans. Using B's public key

What does projection of a relation give? Ans.gives vertical partition of relation corresponding to specified columns.

For disk or direct access storage, which is best ?

a. AVL

b. B-tree

c. Red tape .

There is a tree with inorder threading Node B is inserted as left child of nade A. Node A already has right child . Where will the null ptr of B point ? ans. Parent of A (perhaps)

There is a diskless workstation. Which will be the first protocol it will use ?

a FTP

b. ARP

c. HTTP

d. RARP

Compiler keeps which of following ? ans. Symbol table

ping' command uses which protocol ? ans. ICMP

Merge sort uses which technique? Ans. Divide and Conquer

Program counter is incremented in

a. fetch (ans)

b. decode

c. execute

what does the following program do ?

f(int n)

```
{

    int c;

    while(n)

    {

    n&=n-1;

    c++;

    }

    print c;

 }
```

ans. Program prints the no. of set bits in no.

-What is this called (char *) (*(*(*A[X]) ( ))) ( )

ans. Array of X pointers to a function returning pointer to functions that are returning pointer to char (not sure)

For synchronisation in distributed computing, what should not be there ?

a. all machines are synchronised by a global clock

b. all systems should have their own clock (perhaps ans)

Java applet of a moving /waving file is running on one machine then it means

a. Java's executable code is downloaded and running on the m/c

b. A virtual X server is running on that m/c while the actual program is running on the web server.

What is in RSA algo. ?

a. First the session key is encrypted & then whole message is encrypted using RSA Algo.

b. Message is encrypted using RsA algo.

c. First Rsa algo is used &then encrypted with the session key.

-What is dirty read?

a. Transaction reexecutes and gives diff. Results from the original execution

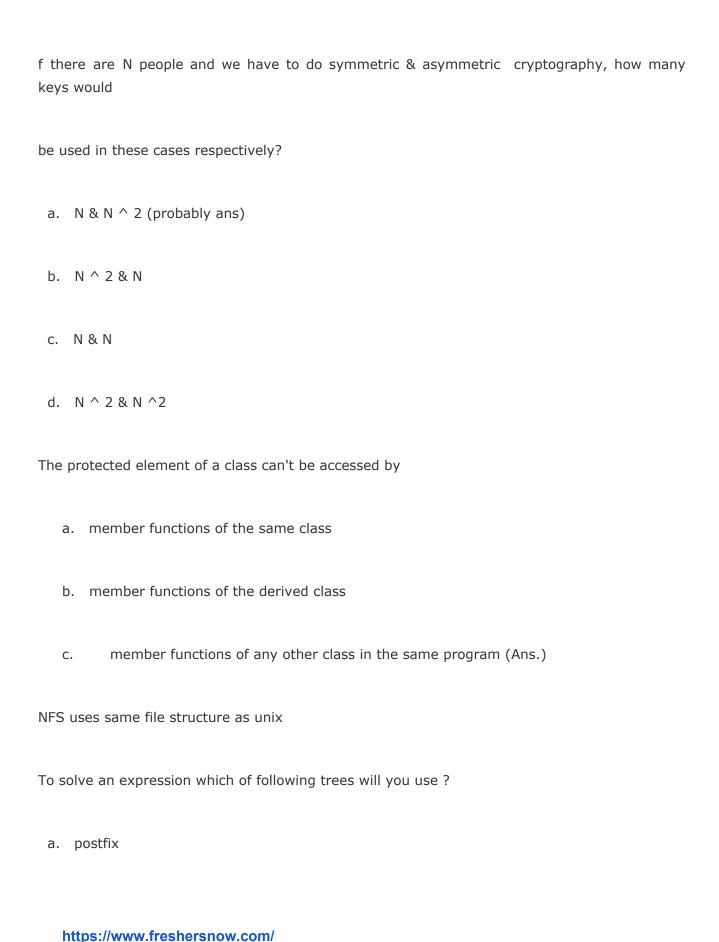b. Read is done when the transaction is not yet committed

-What is coupling ?

a. It tells the strength of interconnection between two program units.

b. It tells the strength of interconnection between twtrength of interconnection between two program units.

Any n/w on the computer can have only

  a. one domain &one IP

  b. more than one domain & more than one Ip

  c. one domain and more than one IP

  d. more than one domain & one IP

Which one does not have file descriptor ?

  a. process

  b. keyboard

  c. pipe

  d. socket

What does CONNECT BY means

a. connect to a different databaser for retreival

b. arrange in tree ordered structure

n two phase commit protocol, why log is used during transmission &reception ?

a. To retrieve the status in case of crash

n which algo. Waiting time is minimun?

  Ans, SJF

How many address bits are there in Ipv6

  ans. 128 bits

During run time heap is managed by

  a. a user process in kernel mode

  b. A system process manages heap for all the processes

  c. A system process for each process

  d. A user process in user mode

In which of following search is efficient?

a. height balanced tree

b. Weight balanced tree

c. Binary tree

A ques. on resource relocation, sharing (I don't remember more than this regarding this ques.)

some ques. options were sth like

a. transparency control

b. Migration control

c. Concurrency control

X:In DFD, input is converted into output by passing through various functional units Y:DFD cannot be used in object oriented design

a. both X& y are correct

b. both X & Y are incorrect

    c.   X correct, Y incorrect

    d.   Xincorrect, Y correct

Where regression testing is used ?

    a.   Dynamic analysers

    b.   Loaders

For Java interfaces , what is true ?

    a.   Functions declarations are not given'

    b.   Variables are not declared

    c.   Instance variables are not used

n a linked list, we can delete a node in order of

    a.   1

    b.   n

    c. $n \wedge 2$

f there are N people and we have to do symmetric & asymmetric cryptography, how many keys would

be used in these cases respectively?

  a. N & N ^ 2 (probably ans)

  b. N ^ 2 & N

  c. N & N

  d. N ^ 2 & N ^2

The protected element of a class can't be accessed by

    a. member functions of the same class

    b. member functions of the derived class

    c.   member functions of any other class in the same program (Ans.)

NFS uses same file structure as unix

To solve an expression which of following trees will you use ?

  a. postfix

b. infix

Technical

```
void x(char* a)

    {

    (a[0])?x(a+1):1;

    printf("%c",*(a+0));

    return 1;

    ........;

    }
```

 Input string 'a' is assigned as AaBbCc , what is the output?

Ans.-cCbBaA

A question on digital gates ANS is OR gate.

What is the binary representation of 41.6785

If the precondition for a subroutine does not hold then

1. postcondition does not hold

2. postcondition may or may not hold

3 . ?

4. ?

In java

1. java strings are mutable. And some other options on java strings

Void f(char *p)

{

p = (char*)malloc(6);

strcpy(p,"hello");

}

void main( )

```
{

 char *p = "BYE";

   f(p);

   printf("%s",p);

}
```

  ANS BYE

A question on write through and write back algo.

What is concerned with transport layer. Ans PORT.

A server can work with ip and ipx protocol.how the server will determine to which protocol the incoming packet coresponds .

For which purpose dhcp is used ANS ip address

 global vaariable defined as ststic will serve the purpose of ---

 Question on NFS ANS It uses the same semantics as unix for file system

Program counter is incremented typically in which uses ANS fetch

NO of NULL pointers in a tree with n leaf nodes ANS N+1

thread take less time than process context Why? Ans. Address space is same.

Which algo is best for sorting 10 elements? Ans. 1> binary tree 2> selection 3> bubble 4> none

question on ICV(networking)

a) When A sends an ICV and message, B computes ICV , checks It with given ICV,and decodes Message

b) Similar other

8 When server A sends a time request to server B, (time synchronization), and response becomes past, What does A do?

a) resets its own clock

b) resends time request again

9 in public key encryption what does A do such that It is not visible to others?

a) A uses public key part of A

b) A uses private key part of A

c) A uses public key part of B

d) A uses private key part of B

function dependency can be described as:

on findind cyclometric complexity of the given program 1> 7 2>5 3> 4 4> 0

Codd's rule related to database

path testing comes under

A) white box

B) black box

when an ip address is not in the computer adresss resolution file   what does It do with that packet

a) Ignores It

c) sends It to default gateway

d) sends It to ethernet server

Execution divided in different stages then this is called ANS. Pipelining

In C the macros are ANS. converted in to inline code during preprocessing

X: verification means doing the right things

Y: validation means doing things right

   a.   both true

   b.   both false

   c.   one true one correct

void insert (key, r) Keytype key, data

   {

   if (n>=max)

   ERROR

   Else

   R[n++].key=k;

   Which is best?   1. sequential search

which is best for associative list searching?

1) single linked list

2) doubly linked list

3) hash table

A question based on SQL ?

which is not necessary condition for deadlock?

1. mutual exclusion

2. no preemption

3. is ANS.

4. Circular wait