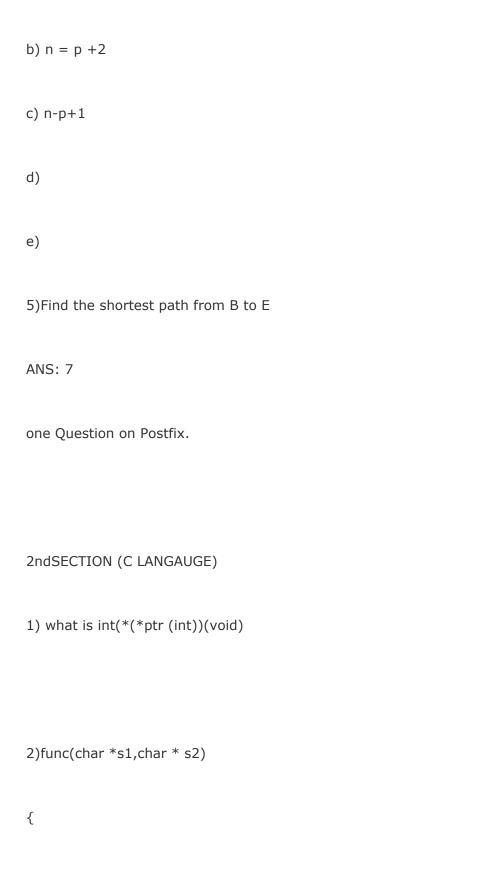
## **Persistent Systems Model Paper Questions**

1st SECTION(Data structures and Algorithm.)
1) From the following when 43 will not be found by binary search (a series was given with last element 43 in each)
2) On which maximum operations cannot be performed .Something like that
3) A hash table has a sie of 11 and data filled in its position like{3,5,7,9,6}how many comparisons have to be made if data is not found in the list in worst case
Answer 2
4)Forest with n Trees and having p edges then
a)n(1-p)



```
char *t;
t=s1;
s1=s2;
s2=t;
}
void main()
{
char *s1="jack", *s2="jill";
func(s1,s2);
printf("%s %s ",s1,s2);
}
OUTPUT jack jill
3) void main()
```

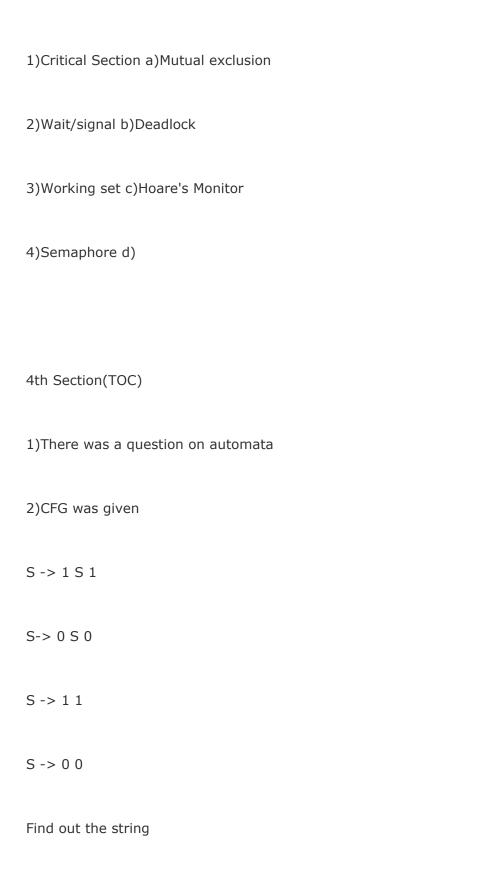
```
{
int a[5] =\{1,2,3,4,5\},i,j=2,b;
for (i = 0; i < 5; i++)
func(j,a[i]);
for (i = 0; i < 5; i++)
printf("%d",a[i]);
}
func(int j,int *a)
{
j=j+1;
a=a+j;
b = b + 2;
}
```

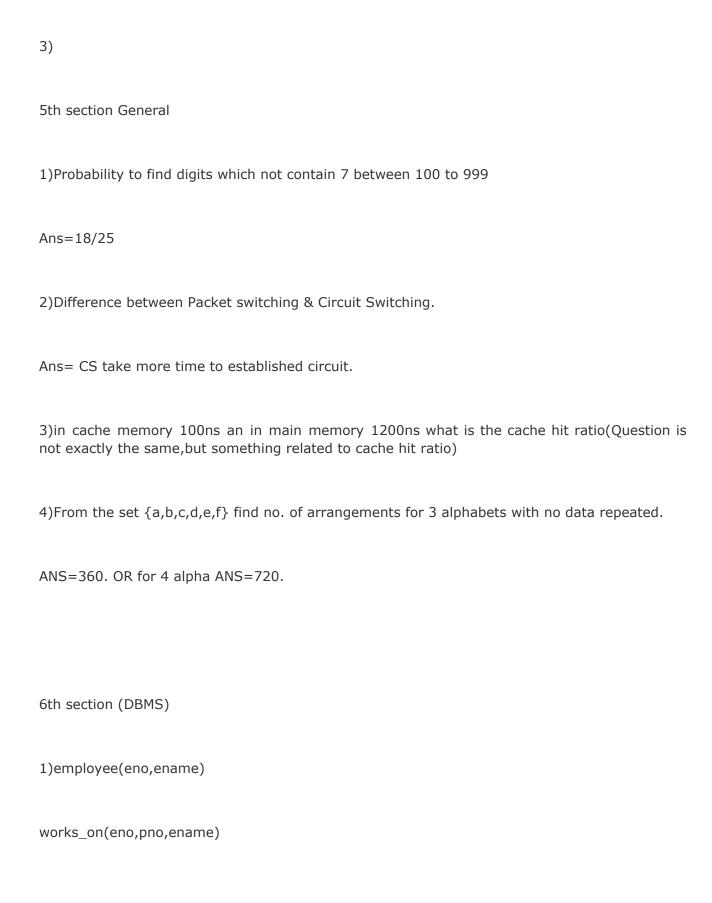
```
OUTPUT: 12345
4) void main()
{
for (a=1;a<=100;a++)
for(b=a;b<=100;b++)
foo();
}
foo()
{ }
how many times foo will be called.
```

ANS: 5050

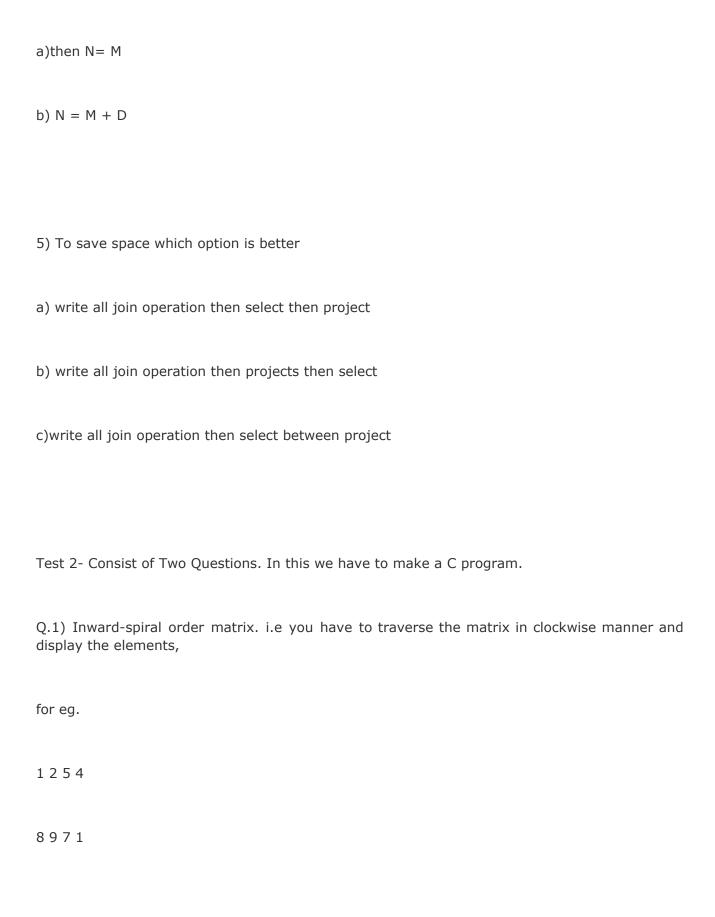
5)A tree was given with nodes assigned clours red, blue, yellow, green and more that one node is having colour red. They have asked that how many times the output will be red if the tota number of evaluation is 11.
some code was givenI don't remember that.
3rd Section(O.S)
1) If there are n processes and each process waits p time in waiting state then cpu utilization is-:
a) n(1-p)
b) n*p
2)No. of pages are given and using LRU algorithm we have to find the number of page faults.
a)2
b)6
c)5
d)7

3)There is a file server which provides locking for mutual exclusion . if any procees locks the file and abruptly terminated this will result in indefinitely locking .The solution they found is to implement a timer for locking of file i.e. if time outs then server assumes that file is indefinitely locked and terminate the process –
a) this solution is perfect for mutual exclausion
b) this will solve indefinite locking
c) this will result in interleaving of file between processes
d) will allow the concurrent process to access the file.
4)A critical Section is
a)for mutual exclusion
b)a set of shared resources
5)Match the following.





project(pno, project)
select ename from employee where eno in(select eno from works_on where pno =(select *from project)
what is the output ?
a)Employee who works on all project.
b)Employee who works one project .
c) name of employee who works on more than one project.
2)Select ename from employee where salary = salary
3)what is the use of B-tree
4)Question on inner Join returning N- tuples & Full outer Join returns M- tuples. For both Variables are given & in options relationship is given to find whichever have greater tuples. And variable D is given





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output should be 1, 2, 5, 4, 1, 3, 8, 5, 3, 2, 9, 8, 9, 7, 6, 7

Q.2)Consider a two dimensional array A[N][N] of the order n x n.Then you find the sub-squares and display the largest sum of the sub-square. Sub- squares are the contigious elements in the array. Largest sum can be find out by summing the elements in the sub-square.