Quiz.

Q1

```
int a = 1
int b = 2
int c = c
int d.

c = ++b
d = a++

c++
b++
++a
System.out.println(a + "," + b + "," + c)
```

Q2

```
class C
int x = -1;
print (x >>> 29)
(x >>> 30)
(x >>> 31)
```

(3)

```
public static void main (String[] args)
Char x = 'x';
int i = 0
System.out.print (true ? x : 0);
System.out.print (false ? i : x);
```

(4)

```
Static void x (int n)
{
  if (n > 1)
    x (n/2);
  System.out.print (n % 2);
```

what does function x do?

(5) what is the T.C. of given below code

```
for ( var i = 0 ; i < n, i++ )
```

$i = 2$

$\rightarrow O(\log n)$

```
int i,j,k = 0;
for( i=n/2; i<=n; i=i+1){
    for(j=2; j<=n; j=j*2){
        k = k+n/2;
    }
}
```

Time complexity $n^2 \log n$

Given 2D matrix the maximum sum of hourglass

```
int arr[i][j]={{1,1,1,0,0,0
               0,1,0,0,0,0
               1,1,1,0,0,0
               0,0,2,1,1,0
               0,0,0,2,0,0
               0,0,1,2,4,0
```

Class D

{

System.out.println(10*20+"final Exam");

System.out.println("final exam"+ 10*20);

}

}

300 finalexam_finalexam

public class Test

{

String S1 = "RAM";

S2 = "RAM";

S3 = "Shyam";

S4 = ABC

println (S1 Compare to (S2));

S1 (compare to (S3));

S1 (compare to S4);

```
Class main {
    Static int R = 5;
           int C = 5;
Static int findMaxSum (int[][] mat)
{
    if (R<3 || C<3)
        return -1;
int max_sum = Integer.MIN_Value;
for (int i=0; i<R-2; i++)
  {
    for (int j=0; j<C-2; j++)
{
    int sum = (mat[i][j] + mat[i][j+1] +
        mat[i][j+2] + mat[i+1][j+1] +
        mat[i+2][j] + mat[i+2][j+1] +
            mat[i+2][j+2]);
max_sum = Math.max (max_sum, sum);
return max_sum;
```

```
}

Static public Void main (String [] args)
{
int [][] mat = {{1, 2, 3, 0, 0}
                {0, 0, 0, 0, 0}
                {2, 1, 4, 0, 0}
                {0, 0, 0, 0, 0}
                {1, 1, 0, 1, 0}};
int res = findMaxSum(mat);
if (res == -1)
System.out.println("Not possible");
else
System.out.println("Maximum sum
                    of hour glass=" + res);
}
```

You have been give an integer a=64. your job is to find the longest sequence at 1|2 flip of a bit in a's binary representation which of the following is the output. for this problem statement ?

Kruskal's Algorithm uses ____ of prim's algorithm uses ____ in determining the MST