LOOPING ASSIGNMENT

Q1. Rewrite the following fragment:

a) Using do while and for loop.

```
int i = 1; //actual loop
int sum = 0; // int sum is 0 in start
while ( sum < 10000 )
 {
sum = sum + i; // the sum
i++; }
```

b) Using do while and for loop.

```
int dsum = 0;
while ( n > 0)
 {
dsum += n % 10;
n /=10; }
```

c) Using while and for loop.

```
do {
sum = sum + i;
System.out.println(sum);
i++; } while(i <= 7);
```

d) Using while and do while loop.

```
 for (d = 0; n != 0; d++)
{
n /= 10; }
System.out.println(d);
```

e) Using do while and for loop.

```
int volume = 25;
```

```java
int barrelSize = 200;
while(volume < barrelSize) {
System.out.println ("The barrel is not full.");
volume = volume +25; }
```

f) Using while and do while loop.
```java
for(int speed = 10; speed => 1; time = time - 1)
 {
   System.out.println ("You are traveling at a speed of " + speed + " miles per hour.");
   }
```

g) Using while and do while loop.
```java
int i=1;
for(int mult = 10,i=7; mult <=30; mult = mult + 1 )
{
 i = i * mult;
System.out.println("i is " +i); }
```

h) Using while and for loop.
```java
int ndx = 0, n=10;
do {
if(ndx<5)
 {
 n+=10;
  } ndx++; }
 while(ndx < limit);
```

l)Using while and for loop.
```java
int n=1;
 double x=0,s=0;
 do{ s=10/n*n;
 x=x+s;
 n++;
```

```
}while(s>0);
 System.out.println("the value of x is "+x);


j) Using while and do while loop.
for ( i = 0 ; i < num ; i++ ) {
if ( i > num / 2 )
continue ; // Jumps to update,
 i++;
 System.out.println ( "Here I am!" ) ; }


k) Using do while and for loop.
 int count = 1;
while (count < 11) {
System.out.println("Count is: " + count); count++; }


l) Using while and do while loop.
 i=2;
do{ System.out.println(i);
 I+=2;
}while(i<51);
 JoptionPane.showmessageDialouge(null,"Thank You");


 m) Using do while and for loop.
 i=100;
 while(i<=50)
 System.out.println(i--);
JoptionPane.showmessageDialouge(null,"Thank You");


n) Using do while and for loop.
int j=1,s=0;
while(j<10)
{ System.out.println(j+ "+");
s=s+j;
```

```
j=j+j%3; }
System.out.println("=" + s);
```

Q2. Write a for loop that displays
(1) the numbers from 51 to 60.
(2) Even numbers from 1 to 100.
(3) Numbers divisible by 5 from 1 to 100.
(4) Numbers from 50 to 10.

Q3. How many times are the following loops executed?

(a)
```
x = 5 ; y = 50 ;
while(x <= y) {
 x = y/x ;
. . . . . . . . . . .
}
```

(b)
```
int m = 10, n= 7;
while(m % n >= 0) {
. . . . . . .
m = m + 1;
n = n + 2;
. . . . . . . . . . . . }
```

Q4. Give the output:
a.
```
for(int i=1; i<=10; i++)
{
jTextfield1.setText(i);
}
```
b.
```
For(int i=1; i<5; i++)
{
System.out.println(" SRDAV");
}
```
c.
```
for(int i=1; i<10; i++)
{
jTextArea1.setText(jTextArea1.getText()+Integer.toString(i));
}
```
d.
```
for(int i=10; i<15; i++)
{
jTextArea1.setText("welcome");
}
```

Q5: Find the errors in the code given below :
```
Int p=3:sum=0;
Do
```

```
 {
sum=p; p+=3;
 }
while(p=<12);
Joptionpane.showMessagedialog(null,"correct the code");
```

Q6. Predict the output of following code fragments:

```
a) int b=0;
do{
int a=2; b++; System.out.println(a++);
 } while(b!=3);
```

```
b) int i = 1, j = 10;
do {
if(i > j) {
   break; }
 j--;
 } while (++i < 5);
System.out.println("i = " + i + " and j = " + j);
```

```
c) for (int z=0; z < 3; z++)
{
switch (z) {
case x: System.out.print("0 ");
 case x-1: System.out.print("1 ");
 case x-2: System.out.print("2 "); } }
```

```
d) int x=4; int j = 1;
switch (x) {
case l: j++;
case 2: j++;
case 3: j++;
case 4: j++;
case 5: j++;
```

```
default: j++; }
System.out.print( j + x);
```

e)
```
int i = 1, j = 0;
switch(i) {
case 2: j += 6;
case 4: j += 1;
 default: j += 2;
case 0: j += 4; }
 System.out.println("j = " + j);
```

f)
```
for(int i = 0; i < 3; i++) {
switch(i) {
case 0: break;
case 1: System.out.print("one ");
case 2: System.out.print("two ");
case 3: System.out.print("three "); } }
 System.out.println("done");
```

g)
```
int j=1,s=0;
 while(j<10) {
 System.out.ptinln(j + "+");
  s= s + j;
 j= j + j%3; }
System.out.println("=" + s);
```

h) what will be the values of variables 'P' and 'Q'
```
 int P,Q=0;
for(P=1 ; P<=4 ; P++) {
 Q+=P;
  Q--; }
```

i)
```
for (int i=12 ; i>5 ; i-=12 )
```

```
    { System.out.println(i); }


j) int i, sum=0;
for ( i=10,sum=5 ; sum<15 ; i++ )
{ sum +=i; }
 System.out.println(sum);


k) int j=1,s=0;
 while(j<10) { s= s + j; i+=3; }
System.out.println("=" + s);


l) int x,y; x=5; y=1;
while(x>0)
{ x=x-1;
 y=y*x;
System.out.ptinln(y); }


m) int c=0,i=2;
while(i<10)
 { c=++i - i * 2; }
System.out.println("c=" + c + "i=" +i);


n) int i=0,x=0;
 do
{ if(i%5==0)
 {
x++;
 System.out.println(x+ " ");
 } ++i;
}while(i<20);
 System.out.println("\n"+x);


o)for(int i=10; i>6; i=i-2)
```

```
 System.out.println(i);

p) for(int i= -5; i< -8; i--)
System.out.println(i+1);
```