

Q.1) Find factorial of a number using Recursive function

```
public class recursiveQ1 {  
    public static int recfact(int a){  
        int f;  
        if(a==1 || a==0){  
            return 1;  
        }  
        else {  
            f=a*recfact(a-1);  
        }  
        return f;  
    }  
    public static void main(String[] args) {  
        int n=5;  
        System.out.println(recfact(n));  
    }  
}
```

Q.2) Find Fibonacci series in following pattern 1 2 3 5 8 13

```
public class fiboPatternQ2 {  
    public static void main(String[] args) {  
        int c,a=0,b=1;  
        int n=3;  
        for(int i=1;i<=3;i++){  
            for(int j=1;j<=i;j++){  
                c=a+b;  
                System.out.print(c+" ");  
                a=b;  
                b=c;  
            }  
            System.out.println();  
        }  
    }  
}
```

Q.3) Solve following pattern

```
3
323
32123
323
3
```

```
***  
**  
*
```

```
public class patternAQ3 {  
  
    public static void main(String[] args) {  
  
        for(int i=3;i>=1;i--){  
            for(int s=1;s<i;s++){  
                System.out.print(" ");  
            }  
            for(int j=3;j>=i;j--){  
                System.out.print(j);  
            }  
            for(int k=3;k>i;k--){  
                System.out.print(k);  
            }  
            System.out.println();  
        }  
        for(int i=1;i<=2;i++){  
            for(int s=1;s<=i;s++){  
                System.out.print(" ");  
            }  
        }
```

```
for(int j=3;j>i;j--){
    System.out.print(j);
}

for(int k=i;k<=1;k++){
    System.out.print(k+2);
}

System.out.println();

}

}

}

public class patternsQ3 {
    public static void main(String[] args) {
        for(int i=3;i>=1;i--){
            for(int j=1;j<=i;j++){
                System.out.print("*");
            }
            System.out.println();
        }
    }
}
```

Q.4) Print binary of a number in reverse order eg. Input 4 O/P 0 0 1

```
import java.util.Scanner;

public class BinaryQ4 {

    public static void main(String[] args) {

        Scanner sc = new Scanner(System.in);
        System.out.println("Enter a number");
        int num = sc.nextInt();
        if (num == 0) {
            System.out.println("0");
            return;
        }
        while (num > 0) {
            int bit = num % 2;
            System.out.print(bit + " ");
            num = num / 2;
        }
    }
}
```

