

DAY03 PAPER

```
package DAY03;
```

```
import java.util.Scanner;
```

```
public class PaperQuestion1 {
```

```
    public static void main(String[] args) {
```

```
        //Q find the factorial of number using recursive function
```

```
        Scanner sc = new Scanner(System.in);
```

```
        System.out.println("Enter a number");
```

```
        int no= sc.nextInt();
```

```
        int m =fact(no);
```

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

```
    }
```

```
    public static int fact(int n)
```

```
    {
```

```
        int f;
```

```
        if(n==1 | n==0)
```

```
        {
```

```
            return 1;
```

```
        }else
```

```
        {
```

```
            f =n*fact(n-1);
```

```
        }
```

```
        return f;
```

```
    }
```

```
}
```

```
Q2) package DAY03;
```

```

public class PaperQuestion2 {

    public static void main(String[] args) {

        int a=1,b=2;

        int c;

        int r=3;

        for(int i=1;i<=3;i++)
            for(int j=1;j<=i;j++)
                {

                    System.out.print(a+" ");

                    c=a+b;

                    a=b;

                    b=c;

                }

        System.out.println();

    }

}

```

Q3)

```
package DAY03;
```

```

public class PaperQuestion3 {

    public static void main(String[] args) {

//        for(int i=3;i>=1;i--)
//            {
//                ***
//                for(int j=i;j>=1;j--) **
//                {
//                    *

```

```
//
                                System.out.print("*");
//
                                }
//
                                System.out.println();
//
                                }
```

//Q1)DIAMOND

```
int n = 3;

for (int i = n; i >= 1; i--) {
    for (int s = i; s > 1; s--) {
        System.out.print(" ");
    }
    for (int j = n; j >= i; j--) {
        System.out.print(j);
    }
    for (int r = i + 1; r <= n; r++) {
        System.out.print(r);
    }
    System.out.println();
}

for (int i = 2; i <= n; i++) {

    for (int s = 1; s < i; s++) {
        System.out.print(" ");
    }
    for (int j = n; j >= i; j--) {
        System.out.print(j);
    }
    for (int j = i + 1; j <= n; j++) {
        System.out.print(j);
    }
}
```

```
}
```

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

```
}
```

```
}}
```