

## Java Logic Prep Test 2

```
import static java.lang.System.out;
import java.util.*;

public class FirstDemo {

    public static void main(String[] args) {

        System.out.println(factorial(5));
        System.out.println("-----");
        starpattern();
        System.out.println("-----");
        binary(8);
        System.out.println("-----");
        factorial();
        System.out.println("-----");
        triangle();
    }

    public static int factorial(int no){

        if(no==1 || no==0)
            return 1;

        return no*factorial(--no);

    }

    public static void starpattern(){
        for(int i=3;i>=1;i--){
            for(int j=i;j>=1;j--){
                System.out.print("*");
            }
            System.out.println();
        }
    }
}
```

```
public static void binary(int no){
```

```
while(no>0){
```

```
System.out.print(no%2);
```

```
no=no/2;
```

```
}
```

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

```
}
```

```
public static void factorial(){
```

```
int n1=0;
```

```
int n2=1;
```

```
for(int i=0;i<3;i++) {
```

```
for(int j=0;j<=i;j++) {
```

```
int sum=n1+n2;
```

```
System.out.print(sum + " ");
```

```
n1=n2;
```

```
n2=sum;
```

```
}
```

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

```
}
```

```
}
```

```
public static void triangle() {
```

```
for(int i=3;i>=1;i-- ) {
```

```
for(int s=i;s>1;s--) {
```

```
System.out.print(" ");
```

```
}
```

```
for(int j=3;j>=i;j--)
```

```
System.out.print(j);
```

```
for(int j=3;j>i;j--)
```

```
System.out.print(j);
```

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

```
}
```

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

```
    for(int s=1;s<=i;s++)  
        System.out.print(" ");  
    for(int j=3;j>i;j--)  
        System.out.print(j);  
    for(int j=3;j>i+1;j--)  
        System.out.print(j);  
    System.out.println();  
}
```

```
}
```

```
}
```