

Aim: To find the factorial of n by using white box testing

Program:

```
import static org.junit.Assert.*;
import java.util.Scanner;
```

```
class factorial
```

```
{
```

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

```
{
```

```
    int i, j, pr = 1;
```

```
    try {
```

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

```
        System.out.println("Enter the number find the factorial");
```

```
        int n = s.nextInt();
```

```
        if (n < 0)
```

```
        {
            System.out.println("Invalid");
```

```
        }
```

```
        else if (n == 0)
```

```
        {
            System.out.println("1");
```

```
        }
```

```
        else
```

```
        {
```

```
            for (i = n; i > 0; i--)
```

```
            {
```

```
                pr = pr * i;
```

```
                System.out.println("The answer is: " + pr);
```

```
                assert true (120 == pr);
```

```
            }
```

```
        }
```

```
        catch (Exception e)
```

```
        {
```

```
            System.out.println("Invalid")
```

```
        }
```

```
    }
```

```
}
```

Output:

Input

Actual output

Enter the no to find the factorial

The answer is : 120

5

Input

Actual output

Enter the no to find the factorial

The answer is : 720

6