

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

```
class myExceptionf extends Exception
```

```
{ private int n;
```

```
myExceptionf(int a)
```

```
{ n=a; }
```

```
public String toString()
```

```
{ return "Factorial.Exception:Invalid Input(>15)"; }
```

```
}
```

```
class factorial
```

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

```
{ Scanner get=new Scanner(System.in);
```

```
int n,f=1;
```

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

```
n=get.nextInt();
```

```
try
```

```
{ if(n>15)
```

```
throw new myExceptionf(n);
```

```
for(int i=1;i<=n;i++)
```

```
f=f*i;
```

```
System.out.println(n+"! = "+f);
```

```
}
```

```
catch(myExceptionf e)
```

```
{ System.out.println("Caught: "+e); }
```

```
}
```

```
}
```

```
D:\Java\jdk1.8.0_261\bin\prog>javac factorial.java
```

```
D:\Java\jdk1.8.0_261\bin\prog>java factorial
```

```
Enter the number for factorial:
```

```
8
```

```
8! = 40320
```

```
D:\Java\jdk1.8.0_261\bin\prog>java factorial
```

```
Enter the number for factorial:
```

```
5
```

```
5! = 120
```

```
D:\Java\jdk1.8.0_261\bin\prog>java factorial
```

```
Enter the number for factorial:
```

```
20
```

```
Caught: Factorial.Exception:Invalid Input(>15)
```

```
D:\Java\jdk1.8.0_261\bin\prog>_
```

