1. Program to print different patterns.

```
In [16]: rows = int(input("Enter a number"))
         for i in range(rows):
             for j in range(i+1):
                 print("*",end=" ")
             print()
```

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

```
In [17]: def factorial(n):
             if n == 0:
                 return 1
             else:
                 return n * factorial(n-1)

         num = int(input("Enter a number: "))
         print("Factorial of", num, "is", factorial(num))
```

```
Factorial of 4 is 24
```

In [ ]: