In [2]:
```python
row_num = int(input("Input number of rows: "))
col_num = int(input("Input number of columns: "))
multi_list=[]
for row in range(row_num):
    a=[]
    for col in range(col_num):
        a.append(col*row)
    multi_list.append(a)


print(multi_list)
```

```
Input number of rows: 3
Input number of columns: 5
[[0, 0, 0, 0, 0], [0, 1, 2, 3, 4], [0, 2, 4, 6, 8]]
```