In [4]:

```python
num = int(input("Enter a Number: "))
def solve(x):
    return "The resultant value is",6*x**2+3*(x)+2
solve(num)
```

Enter a Number: 2

Out[4]:

('The resultant value is', 32)

In [2]:

```python
solve(2)
```

Out[2]:

('The resultant value is', 32)

In [5]:

```python
for i in range(1,5):
    print(i)
```

1
2
3
4

In [9]:

```python
for i in range(1,5):
    print()
    for j in range(1,i+1):
        print(j,end =" ")
```

1
1 2
1 2 3
1 2 3 4

In [15]:

```python
for i in range(1,5):
    print()
    for j in range(1,i+1):
        print(i,end =" ")
```

1
2 2
3 3 3
4 4 4 4

In [18]:

```python
num = int(input("Enter a number: "))
for i in range(1,num+1):
    for k in range(num,i,-1):
        print(" ",end = " ")
    for j in range(1,i+1):
        print(j,end = " ")

```

```
Enter a number: 5
    1
    1 2
    1 2 3
    1 2 3 4
    1 2 3 4 5
```

In [17]:

```python
num = int(input("Enter a number: "))
for i in range(1,num+1):
    for k in range(num,i,-1):
        print(" ",end = " ")
    for j in range(1,i+1):
        print(i,end = " ")
    print()
```

```
Enter a number: 5
        1
      2 2
    3 3 3
  4 4 4 4
5 5 5 5 5
```

# Exception Handling

1. Runtime Error - Poor understranding of the logic
2. Compile time Error - Poor understanding of the program

Exceptions are raised when the program is syntatically correct but the code reultant in an error Error:Errors are the problems in a program due to which the program will stop the execution. there are teo types of error Syntax errors (compile time error) Logical errors (Exceptions)

In [20]:

```python
temp1 = int(input('Enter the number: '))
temp2 = int (input("Enter the number: "))
try:
    res = temp1/temp2
except:
    print("Number not divisibe by zero")
else:
    print("Result:",res)
```

Enter the number: 10
Enter the number: 0
Number not divisibe by zero

In [23]:

```python
temp1 = int(input('Enter the number: '))
try:
    temp2 = int (input("Enter the number: "))
    res = temp1/temp2
except ZeroDivisionError:
    print("Number not divisibe by zero")
except ValueError:
    print("Invalid Input")
except:
    print("Sorry")
else:
    print("Result:",res)
```

Enter the number: 45
Enter the number: bih
Invalid Input

In [ ]:

```python

```