

Mathematical Operations in Python

Suppose you want to add two numbers using python coding then you have to use + operator. For example, the python code for summing up the numbers 2 and 4 is given below:

```
a=2
```

```
b=4
```

```
print(a+b)
```

The output obtained is given below:

```
In [1]: a=2
...: b=4
...: print(a+b)
6
```

In order to subtract two numbers, we use – operator. For example, to find the difference between 4 and 2, we write below python code:

```
a=2
```

```
b=4
```

```
print(b-a)
```

The output obtained is given below:

```
In [2]: a=2
...: b=4
...: print(b-a)
2
```

Now, suppose you have to multiply two given numbers then we have to use * operator. For example, if you want to multiply 211 and 450 then we write below python code:

```
a=211
```

```
b=450
```

```
print(a*b)
```

The following output is obtained:

```
In [3]: a=211
...: b=450
...: print(a*b)
94950
```

If you have to divide two numbers, then / operator is used. For example, if you want to divide 840 by 5, we have to write below python code:

```
a=840
```

```
b=5
```

```
print(a/b)
```

The output obtained is given below:

```
In [4]: a=840
...: b=5
...: print(a/b)
168.0
```

Now coming to the little bit complex part of mathematical operations. Suppose. You have to find the value of 5^8 (5 raised to the power 8). So, in order to solve this exponential problem, we use ** operator. The python code is given below:

```
a=5
```

```
b=8
```

```
print(a**b)
```

The output is shown below:

```
In [5]: a=5
...: b=8
...:
...: print(a**b)
390625
```

What will be the final value of this expression $5*5/5+5^3$? In order to solve this problem we follow the rule of PEMDAS. P stands for parentheses, E stands for exponential, M stands for multiplication, D stands for division, A stands for addition and S stands for subtraction. The priority is given from left to right. The python code for solving the given expression is given below:

```
print(5*5/5+5**3)
```

The output is shown below:

```
In [6]: print(5*5/5+5**3)
130.0
```