

1. Calculate Addition, Subtraction, Multiplication and Division from 2 numbers provided by user input.

->

```
a = float(input("Enter the First Number: "))
```

```
b = float(input("Enter the Second Number: "))
```

```
print("addition:-")
```

```
print("{} + {} = ".format(a, b))
```

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

```
print("subtraction:-")
```

```
print("{} - {} = ".format(a, b))
```

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

```
print("multiplication:-")
```

```
print("{} * {} = ".format(a, b))
```

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

```
print("division:-")
```

```
print("{} / {} = ".format(a, b))
```

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

Output :

```
>>> %Run 'add div.py'
Enter the First Number: 5
Enter the Second Number: 6
addition:-
5.0 + 6.0 =
11.0
subtraction:-
5.0 - 6.0 =
-1.0
multiplication:-
5.0 * 6.0 =
30.0
division:-
5.0 / 6.0 =
0.8333333333333334
```

2. Write Program for simple interest.

Simple Interest = $(P \times T \times R)/100$

->

```
def simple_interest(p,t,r):  
    print('The principal is', p)  
    print('The time period is', t)  
    print('The rate of interest is',r)
```

```
    si = (p * t * r)/100
```

```
    print('The Simple Interest is', si)
```

```
P = int(input("Enter the principal amount :"))
```

```
T = int(input("Enter the time period :"))
```

```
R = int(input("Enter the rate of interest :"))
```

```
simple_interest(P,T,R)
```

Output :

```
>>> %Run 'P T R.py'
Enter the principal amount :2000
Enter the time period :5
Enter the rate of interest :10
The principal is 2000
The time period is 5
The rate of interest is 10
The Simple Interest is 1000.0
.
```

3. Create a Marksheet for 5 subjects and calculate total, average and grade with if else.

->

```
a=float(input("enter your python marks="))
b=float(input("enter your cyber security marks="))
c=float(input("enter your j2EE marks="))
d=float(input("enter your project marks="))
e=float(input("enter your lab assignment marks="))
```

```
tot = a + b + c + d + e
print(f"Total marks = " , tot)
avg = tot / 5
print(f"average marks = " , avg)
```

```
if avg >= 91 and avg <= 100:
    print("Your Grade is A1")
elif avg >= 81 and avg < 91:
    print("Your Grade is A2")
elif avg >= 71 and avg < 81:
    print("Your Grade is B1")
elif avg >= 61 and avg < 71:
    print("Your Grade is B2")
elif avg >= 51 and avg < 61:
    print("Your Grade is C1")
elif avg >= 41 and avg < 51:
    print("Your Grade is C2")
elif avg >= 33 and avg < 41:
    print("Your Grade is D")
elif avg >= 21 and avg < 33:
    print("Your Grade is E1")
elif avg >= 0 and avg < 21:
    print("Your Grade is E2")
```

Output :

```
>>> %Run marksheet.py
enter your python marks=78
enter your cyber security marks=82
enter your j2EE marks=69
enter your project marks=70
enter your lab assignment marks=89
Total marks = 388.0
average marks = 77.6
Your Grade is B1
```

4. Write a program to add employee names in a list EMPNAME and perform add, remove and append methods.

```
list=["roman","domnic","brian","tej"]  
print(list)  
list.append("jecob")  
print(list)  
list.insert(1, "ramzy")  
print(list)  
list.remove("roman")  
print(list)
```

```
>>> = RESTART: C:/Users/yashm/AppData/Local/Programs/Python/Python312/insert remove  
append.py  
['roman', 'domnic', 'brian', 'tej']  
['roman', 'domnic', 'brian', 'tej', 'jecob']  
['roman', 'ramzy', 'domnic', 'brian', 'tej', 'jecob']  
['ramzy', 'domnic', 'brian', 'tej', 'jecob']  
>>>
```


5. Print 1 to 10 and 10 to 1 with for loop.

->

```
for i in range(10, 0, -1):  
    print(i)
```

```
for i in range(1, 11):  
    print(i)
```

Output :

```
>> == RESTART: C:/Users/yashm/AppData/Local/Programs/Python/Python312/1 to 10.py
10
9
8
7
6
5
4
3
2
1
1
2
3
4
5
6
7
8
9
10
>>
```