

```
In [49]: num1 = int(input("Enter number 1:"))
num2 = int(input("Enter number 2:"))
sum_of = num1+num2
diff = num1-num2
product = num1*num2
print("Sum of two number is",sum_of)
print("Difference of two number id",diff)
print("Product of two number is",product)
```

```
Enter number 1:12
Enter number 2:23
Sum of two number is 35
Difference of two number id -11
Product of two number is 276
```

2.find remainder of a num

```
In [50]: num1 = int(input("Enter number 1:"))
num2 = int(input("Enter number 2:"))
rim = num1 % num2
print("Riminder is",rim)
```

```
Enter number 1:123
Enter number 2:1234
Riminder is 123
```

3.compute square and cube of a given no

```
In [11]: num = int(input("Enter number :"))
sq = num**2
cube = num**3
print("Squauere is:",sq)
print("cube is:",cube)
```

```
Enter number :12
Squauere is: 144
cube is: 1728
```

4.calculate average of three number

```
In [13]: num1 = int(input("Enter number 1:"))
num2 = int(input("Enter number 2:"))
num3 = int (input("Enter number 3:"))
avg = (num1+num2+num3)/3
print("Avrage of three no is",avg)
```

```
Enter number 1:12
Enter number 2:13
Enter number 3:14
Avrage of three no is 13.0
```

5.convert total second into minutes and second

```
In [16]: sec = int(input("enter seconds"))
hour=sec//3600
```

```
print("Total Minute.",minn)
```

enter seconds3671
total hours: 1
Total Minute: 1

6.find area of a circlr of a given rad

```
In [18]: import math  
r = float(input("enter radius"))  
area = math.pi*r*r  
print("area is",area)
```

enter radius12.21
area is 468.36151332704617

7.calculate simple intrest

```
In [20]: p = float(input("Enter principal amount"))  
r = float(input("Enter intrest"))  
t = int(input("Enter time period"))  
si = (p*t*r)/100  
print("Simple intrest is:",si)
```

Enter principal amount1200
Enter intrest2.5
Enter time period12
Simple intrest is: 360.0

8.calculate power of no using exponent operator

```
In [22]: num = int(input("Enter a number"))  
print("power of num is:",num**2)
```

Enter a number12
power of num is: 144

9.Find Last Digit of a number

```
In [26]: num =int(input("enter a no:"))  
print("last digit is",num%10)
```

enter a no:123
last digit is 3

10.Calculate total and per of 5 subject mark

```
In [32]: sub1 = float(input("enter marks of subject 1:"))  
sub2 = float(input("enter marks of subject 2:"))  
sub3 = float(input("enter marks of subject 3:"))  
sub4 = float(input("enter marks of subject 4:"))  
sub5 = float(input("enter marks of subject 5:"))  
total_mark = sub1+sub2+sub3+sub4+sub5  
print("avrage is ",total_mark/5)  
per = (total_mark/500)*100  
print("percentage is",per)
```

```
enter marks of subject 4:90  
enter marks of subject 5:95  
avrage is 91.8  
percentage is 91.8
```

11.write a program to demonstarte += *=

```
In [35]: num = int(input("enter a num"))  
s=0  
s1=0  
s+=num  
s1*=num  
print(s)  
print(s1)
```

```
enter a num12  
12  
0
```

12.update a variable by adding 10 and then multiply by 12

```
In [36]: num = int(input("enter a num"))  
num = (num+10)*12  
print(num)
```

```
enter a num12  
264
```

13.write an expression using // to reduce a num

```
In [41]: num = int(input("enter a num"))  
num//=2  
print(num)
```

```
enter a num123  
61
```

14.use assignment operator to swap two no without using a third variable

```
In [44]: num1 = int(input("enter a num1:"))  
num2 = int(input("enter a num2:"))  
num1=num1+num2  
num2=num1-num2  
num1=num1-num2  
print("fist no is",num1)  
print("Second no is",num2)
```

```
enter a num1:12  
enter a num2:23  
fist no is 23  
Second no is 12
```

15.modify a variable using %-

```
In [48]: num = int(input("enter a num"))  
num%=<2
```

find the solution of quadratic equation

```
In [51]: a = int(input("enter a coefficient of x^2:"))
b = int(input("enter a coefficient of x:"))
c = int(input("enter value of c :"))
root1 = (-b+((b**2-4*a*c)**0.5)/2*a)
root2 = (-b-((b**2-4*a*c)**0.5)/2*a)
print("Root one is",root1)
print("Root two is ",root2)
```

```
enter a coefficient of x^2:2
enter a coefficient of x:5
enter value of c :9
Root one is (-5+6.855654600401044j)
Root 2 is (-5-6.855654600401044j)
```

Accept basic salary from user calculate DA(50%), HA(20%) and calculate gross salary

```
In [54]: sal = float(input("enter your salary"))
DA = sal*0.50
HA = sal*0.20
Total_sal = sal+HA+DA
print("total salary is",Total_sal)
```

```
enter your salary12000
total salary is 20400.0
```

temp convert f->c and c->f

```
In [8]: c = float(input("Enter temp is celcius"))
f = ((9/5)*c)+32
f1 = float(input("Enter temp is ferenhite"))
c1 = ((5/9)*f)-32
print("for c->f is ",f)
print("for f->c is",c1)
```

```
Enter temp is celcius100
Enter temp is ferenhite100
for c->f is 212.0
for f->c is 85.77777777777779
```

find the sum of n natural no

```
In [63]: n = int(input("Enter a no"))
sm = int((n*(n+1))/2)
print("Sum of n natural no is",sm)
```

```
Enter a no10
Sum of n natural no is 55
```

take input of two no and perform all logical and bitwise operator

```
In [2]: n1 = int(input("Enter a no1:"))
n2 = int(input("Enter a no2:"))
```

```
print(n1 | n2)
#not
print (~ n2)
#xor
print(n1 ^ n2)
#<< left shift
print(n1<<2)
#>> right shift
print(n1>>2)
```

```
Enter a no1:1011
Enter a no2:1010
1010
1011
-1011
1
4044
252
```

In []:

In []: