

print hello world

```
In [34]: print("hello world")
```

hello world

1.use all operators in two variables

```
In [3]: def operation():  
    a=int(input("enter the number for a:"))  
    b=int(input('enter the number for b:'))  
    c=a+b  
    print("addition of two variable is:",c)  
    d=a-b  
    print("subtraction of two variable is:",d)  
    e=a*b  
    print("multiplication of two number is:",e)  
    f=a//b  
    print("division of two numbers is:",f)  
    operation()
```

enter the number for a:4
enter the number for b:8
addition of two variable is: 12
subtraction of two variable is: -4
multiplication of two number is: 32
division of two numbers is: 0

2.find simple interest ¶

```
In [4]: amt=int(input("enter the principle amount:"))  
    time=int(input("enter the time:"))  
    rate=3.5  
  
    def simple_interest(amount,time,rate):  
  
        total_interest=(amt*time*rate)/100  
        print("total_interest are:",total_interest)  
    simple_interest(amt,time,rate)
```

enter the principle amount:4500
enter the time:2
total_interest are: 315.0

3.program to calculate salary,input basic pay,PRA=16%B.P.,DA=19%B.P.,PF=10%,HRA=15%,net=bas

```
In [2]: print("salary program")
name=str(input("enter the name of the employee:"))
basic=int(input("enter the basic salary of the employee:"))
DA=float(basic*0.19)
HRA=float(basic*0.15)
PF=float(basic+DA)*0.10
netpay=float(basic+DA+HRA)
grosspay=float(netpay-PF)
print("NAME OF THE EMPLOYEE:",name)
print("BASIC SALARY:",basic)
print("DEARNESS ALLOW:",DA)
print("HOUSE RENT ALLOW:",HRA)
print("NET SALARY PAY:",netpay)
print("RPROVIDENT FUND:",PF)
print("GROSS PAYMENT:",grosspay)
```

```
salary program
enter the name of the employee:Preeti
enter the basic salary of the employee:20000
NAME OF THE EMPLOYEE: Preeti
BASIC SALARY: 20000
DEARNESS ALLOW: 3800.0
HOUSE RENT ALLOW: 3000.0
NET SALARY PAY: 26800.0
RPROVIDENT FUND: 2380.0
GROSS PAYMENT: 24420.0
```

4.calculate the grades

```
In [3]: print("enter the marks of five subjects:")
eng=int(input("marks of english:"))
maths=int(input("marks of maths:"))
hindi=int(input("marks of hindi:"))
sst=int(input("marks of sst:"))
science=int(input("marks of scinece:"))
total=eng+maths+sst+hindi+science
print("total marks is:",total)
avg=total//5
print("average marks:",avg)
if(0<=avg<=100):
    if(avg>=90):
        print("grade:A")
    elif(avg>=80):
        print("grade:B")
    elif(avg>=70):
        print("grade:C")
    elif(avg>=60):
        print("grade:D")
    else:
        print("grade:F")
else:
    print("invalid marks/////")
```

```
enter the marks of five subjects:
marks of english:98
marks of maths:99
marks of hindi:92
marks of sst:93
marks of scinece:90
total marks is: 472
average marks: 94
grade:A
```

5.Print your name 10 times

```
In [8]: for i in range(1,11):
        print(i,"preeti")
```

```
1 preeti
2 preeti
3 preeti
4 preeti
5 preeti
6 preeti
7 preeti
8 preeti
9 preeti
10 preeti
```

6.Print the sum integers till 5

```
In [13]: sum=0
for i in range(5):
    sum=sum+i
print(sum)
```

10

7.Program to input the five numbers from the users and print the sum of those numbers

```
In [14]: sum=0
for i in range(5):
    num=int(input("enter the number:"))
    sum=sum+num
print(sum)
```

```
enter the number:4
enter the number:8
enter the number:2
enter the number:9
enter the number:1
24
```

8.Program to print even numbers till 20

```
In [16]: for i in range(1,20):
        if(i%2==0):
            print(i)
```

```
2
4
6
8
10
12
14
16
18
```

9.Print numbers that are divisible by 5 till 50

```
In [17]: for i in range(1,50):  
         if(i%5==0):  
             print(i)
```

```
5  
10  
15  
20  
25  
30  
35  
40  
45
```

10.Program to print the sum of even numbers and odd numbers till 20

```
In [20]: even=0  
         odd=0  
         for i in range(20):  
             if(i%2==0):  
                 even=even+i  
             else:  
                 odd=odd+i  
         print("sum of even numbers:",even)  
         print("sum of odd numbers:",odd)
```

```
sum of even numbers: 90  
sum of odd numbers: 100
```

11.Program to print the sum of the digits of a number

```
In [26]: num=int(input("enter the number:"))  
         sum=0  
         while(num!=0):  
             if(num>0):  
                 m=num%10  
                 sum=sum+m  
                 num=num//10  
         print(sum)
```

```
enter the number:145  
10
```

12.Armstrong number: is a number that equals the sum of its cube of its individual digits . For

example: $153=1^3+5^2+3^3$ Program to find

```
In [28]: n=int(input("enter the number:"))
t=n
sum=0
while(n!=0):
    if(n>0):
        m=n%10
        sum=sum+m*m*m
        n=n//10
print(sum)
if(sum==t):
    print("it is a armstrong number")
else:
    print("its not a armstrong number")
```

```
enter the number:153
153
it is a armstrong number
```

13.To find whether the number is prime or not

```
In [33]: num=int(input("enter the number:"))
flag=False
if(num==1):
    print(num,"is not a prime number")
elif(num>1):
    for i in range(2,num):
        if(num%i==0):
            flag=True
            break
    if(flag==False):
        print(num,"is not a prime number")
    else:
        print(num,"is a prime number")
```

```
enter the number:12
12 is a prime number
```