Accept input from user and store it in variable and print the value

```
a=int(input("num1"))
print(a)
```

```
num15
5
```

Add,subtract,multiply,divide

```
a=int(input("num1"))
b=int(input("num2"))

c=a+b
print(c)
d=a-b
print(d)
e=a/b
print(e)
f=a*b
print(f)
```

```
num15
num210
15
-5
0.5
50
```

Conversion of one unit to another (such as hours to minutes, miles to km)

```
#minutes to hours
a=int(input("minutes"))
c=a/60
print(c,"hours")
#km to mile
b=int(input("mile"))
km=b*1.60934
print(km)
```

```
minutes60
1.0 hours
mile2
3.2
```

Usage of mathematical functions

```
import math
```

```python
print(math.ceil(1.4))
print(math.floor(1.4))
print(math.fabs(1.4))
print(math.fmod(20,4))
```

```
2
1
1.4
0.0
```

Mathematical Calculator

```python
a=int(input("num1"))
b=int(input("num2"))
o=str(input("operators"))

if o == '+':
    print(a+b)
elif o == '-':
    print(a-b)
elif o == '*':
    print(a*b)
else:
    print(a/b)
```

```
num15
num23
operators/
1.6666666666666667
```

Grades of 5 different subjects

```python
sub1=int(input("maths"))
sub2=int(input("phy"))
sub3=int(input("chem"))
sub4=int(input("CSE"))
sub5=int(input("eng"))

grade=(sub1+sub2+sub3+sub4+sub5)
print(grade)

if grade>400 and grade <= 500:
    print("O")
elif grade>=300 and grade<400:
    print("A")
elif grade>=200 and grade<300:
    print("B")
elif grade>=100 and grade<200:
    print("c")
else:
```

```python
    print("F")
```

```
maths100
phy100
chem100
CSE100
eng100
500
0
```

Even and odd numbers

```python
a=int(input("num1"))
b=int(input("num2"))
e=0
o=0

for i in range(a,b):
    if i%2==0:
        print(i)
        e=e+1

for j in range(a,b):
    if j%2!=0:
        print(j)
        o=o+1

print(e,o)
```

```
num11
num210
2
4
6
8
1
3
5
7
9
4 5
```

Factorial

```python
a=int(input("num1"))
f=1
for i in range(1,a+1):
    f=f*i
print(f)
```

```
num15
120
```

Fibinocci series

```
a=int(input("range"))
n1=0
n2=1
print(n1)
print(n2)

for i in range(0,a-1):
   n3=n1+n2
   print(n3)
   n1=n2
   n2=n3
```

```
range7
0
1
1
2
3
5
8
13
```

Palindrome

```
a=int(input("num1"))
rev=0
original=a

while(a>0):
   rem=a%10
   rev=(rev*10)+rem
   a=a//10

if original==rev:
   print("palindrome")
else:
   print("not a palindrome")
```

```
num1626
palindrome
```

Strong number

```
sum=0
num=int(input("Enter a number:"))
```

```python
temp=num
while(num):
    i=1
    f=1
    r=num%10
    while(i<=r):
        f=f*i
        i=i+1
    sum=sum+f
    num=num//10
if(sum==temp):
    print("strong number")
else:
    print("not a strong number")
```

Compound interest

```python
n=int(input("Principle amt"))

rate=int(input("Rate"))

years=int(input("Years"))

for i in range(years):

    n=n+((n*rate)/100)

print(n)
```

Using (.format)

```python
a=" 18 years "
b= "My name is Sankalp, and I am {}"
print(b.format(a))

c=185
d=53
e="SRH scored {} runs and won by {} runs"
print(e.format(c,d))

f=185
g=53
h="SRH scored {1} runs and won by {0} runs"
print(h.format(g,f))
```