

```
#take character input from user
a=input("enter any character: ")
#check for alphabet and digit.
if a.isalpha() :
    print("/n"+a,"is A ALPHABET.")
elif a.isdigit() :
    print("/n"+a,"is A DIGIT.")
else:
    print("/n"+a,"is a SYMBOL.")
```

```
enter any character: BULLET
/nBULLET is A ALPHABET.
```

```
#take character input from user
a=input("enter any character: ")
#check for vowel and consonant.
if(a=='A' or a=='a' or a=='E' or a=='e' or a=='I' or a=='i' or a=='o'
    or a=='U' or a=='u') :
    print(a,"is a vowel. ")
else:
    print(a,"is a consonant")
```

```
enter any character: G
G is a consonant
```

```
#take integer input from user
num=15
if num>0:
    print("positive number.")
else:
    print("negative number.")
```

```
positive number.
```

```
#Evaluating the expression.
P=(20*1+100*2+6*4+8*2)
X3=(P-(118*2))
print(X3)
```

24

```
#Arithmetic operation.
a=15
b=26
#Addition of numbers
add = a + b
#subtraction of numbers
sub = a - b
```

```
- - -  
#division(float) of number  
div1 = a / b  
#division(floor) of number  
div2 = a // b  
#modulo of both number  
mod = a % b  
#power  
p = a ** b  
#print results  
print(add)  
print(sub)  
print(mul)  
print(div1)  
print(div2)  
print(mod)  
print(p)
```

```
41  
-11  
390  
0.5769230769230769  
0  
15  
3787675244106352329254150390625
```

```
#take two different values from user input.  
# ""  
a=[11, 15, 26]  
b=[11, 26, 15]
```

```
#comparing using "" operator.  
if a == b:  
    print('yes')  
else:  
    print('no')
```

```
no
```

```
import math as m  
x=float(input("enter the number 1:"))  
y=float(input("enter the number 2:"))  
print("a",abs(x))  
print("b",m.sqrt(x))  
print("c",m.exp(x))  
print("d",m.log(x))  
print("e",m.pow(x,y))  
print("f",m.ceil(x))  
print("g",max(x,y))  
print("h",min(x,y))
```

```
enter the number 1:10  
enter the number 2:15  
a) 10.0
```

- c) 22026.465794806718
- d) 2.302585092994046
- e) 1000000000000000.0
- f) 10
- g) 15.0
- h) 10.0

```
num1=344.767
num2=567.12367
num3=12300000
print("{:9.2f}".format(num1))
print("{:5.3f}".format(num2))
print("{:.3e}".format(num3))
```

```
344.77
567.124
1.230e+07
```