In [1]:
```
chrct=input('enter any character:')
if ((chrct>='a' and chrct<='z') or (chrct>'A' and chrct<='Z')):
    print("you typed,",chrct,"is an Alphabet")
elif (chrct>='0'):
    print('you typed,',chrct,'is a digit')
else:
    print("you typed,",chrct,"is a specia character")
```

```
enter any character:j
you typed, j is an Alphabet
```

In [3]:
```
alph=input("enter a alphabet:")
if alph in ('a','e','i','i','o','u','A','E','I','O','U'):
    PRINT("you typed,",alph,"is a vowel")
elif ((alph<='a' and alph>='Z') or (alph<='A' and alph>='Z') and alph!='a','e','i
    print("you typed,",alph,"is a consonant")
```

```
enter a alphabet:d
you typed, d is a consonant
```

In [4]:
```
num=int(input("enter a number:"))
if num>0:
    print(num,"is a positive number.")
elif num==0:
    print(num,"is a zero(neutral).")
else:
    print(num,"is a negative number.")
```

```
enter a number:-50
-50 is a negative number.
```

In [5]:
```
p=20*1+100*2+6*4+3*8
x3=(p-(118*2))
print(x3)
```

```
32
```

In [6]:
```
a=float (input("enter number 1 :"))
b=float (input("enter number 2 :"))
add=a+b
sub=a-b
mul=a*b
div=a/b
remainder=a%b
print(f"{a} + {b} = {add}")
print(f"{a} - {b} = {sub}")
print(f"{a} * {b} = {mul}")
print(f"{a} / {b} = {div}")
print(f"{a} % {b} = {remainder}")
```

```
enter number 1 :5
enter number 2 :2
5.0 + 2.0 = 7.0
5.0 - 2.0 = 3.0
5.0 * 2.0 = 10.0
5.0 / 2.0 = 2.5
5.0 % 2.0 = 1.0
```

In [7]:
```
c=int(input("enter 1st number : "))
d=int(input("enter 2nd number : "))
c is d
```

```
enter 1st number : 3
enter 2nd number : 2
```

Out[7]:
```
False
```

In [9]:
```
import math as m
x=float (input("enter number 1 :"))
y=float (input("enter number 2 :"))
print("i)",abs(x))
print("ii)",m.sqrt(x))
print("iii)",m.exp(x))
print("iv)",m.log(x))
print("v)",m.pow(x,y))
print("vi)",m.ceil(x))
print("vii)",max(x,y))
print("viii)",min(x,y))
```

```
enter number 1 :21
enter number 2 :31
i) 21.0
ii) 4.58257569495584
iii) 1318815734.4832146
iv) 3.044522437723423
v) 9.745365607146045e+40
vi) 21
vii) 31.0
viii) 21.0
```

In [11]:
```
n1=344.767
n2=567.12367
n3=12300000
print("{:9.2f}".format(n1))
print("{:5.3f}".format(n2))
print("{:.3e}".format(n3))
```

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

In [ ]:
```

```