

```
#Question no.01
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 Special Character")
```

```
☞ Enter any character : 2
    You typed, 2 is a Digit
```

```
#Question no.02
alph=input("Enter an Alphabet : ")
if alph in ('a','e','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')):
    print("You typed,",alph,"is a Consonant")
else :
    print("You typed,",alph,"is not an Alphabet")
```

```
Enter an Alphabet : l
You typed, l is a Consonant
```

```
#Question no.03
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 : 19

19 is a Positive Number.

```
#Question no.04      #Evaluation
```

```
P=20*1+100*2+6*4+3*8 #P=(20*1)+(100*2)+(6*4)+(3*8)=20+200+24+24=268
```

```
X3=(P-(118*2))      #X3=(268-(118*2))=268-236=32
```

```
print(X3)
```

32

```
#Question no.05
```

```
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 :10

Enter Number 2 :6

10.0 + 6.0 = 16.0

10.0 - 6.0 = 4.0

10.0 * 6.0 = 60.0

```
10.0 / 6.0 = 1.6666666666666667
```

```
10.0 % 6.0 = 4.0
```

```
#Question no.06
```

```
c=int(input("Enter 1st number : "))
```

```
d=int(input("Enter 2nd number : "))
```

```
c is d
```

```
Enter 1st number : 5
```

```
Enter 2nd number : 2
```

```
False
```

```
#Question no.07
```

```
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 :4
```

```
Enter Number 2 :9
```

```
i) 4.0
```

```
ii) 2.0
```

```
iii) 54.598150033144236
```

```
iv) 1.3862943611198906
```

```
v) 262144.0
```

```
vi) 4
```

vii) 9.0
viii) 4.0

```
#Question no.08
```

```
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