

LOGIC QUESTION - IF INPUT IS 1 THEN OUTPUT SHOULD BE 2 OR INPUT IS 2 THEN OUTPUT SHOULD BE 1(SOLUTION SHOULD BE IN 1 LINE)

```
1 x = 2 if input()==1 else 1
2 x
```

```
1
1
```

```
1 x = 2 if input()==1 else 1
2 x
```

```
2
1
```

▼ wrong

```
1 def onetwo(a) :
2     if(a==1) :
3         return(2)
4     elif(a==2) :
5         return(1)
```

```
1 onetwo(1)
```

```
2
```

```
1 onetwo(2)
```

```
1
```

should be one line

Double-click (or enter) to edit

WHAT IT DOES - [::-1]

```
1 x="SWAROOP"
2 x
```

```
'SWAROOP'
```

```
1 x[::-1] #it reverses string or list
```

'POORAWS '

Write a python code to swap two variables , how to swap the numbers?

▼ repeated twice

```
1 a=10
2 b=20
3 print(a,b)
```

10 20

1

```
1 a,b=b,a
2 print(a,b)
```

20 10

2

```
1 temp=a
2 a=b
3 b=a
4 print(a,b)
```

10 10

3 Addition method

```
1 print(l,r) #20,10
2 l=l+r      #30,10
3 r=l-r      #30,20
4 l=l-r
5 print(l,r)
```

20 10
10 20

subtraction method

```
1 print(l,r) #10,20
2 l=l-r      #-10,20
3 r=l+r      #-10,10
4 l=r-l      #
5 print(l,r)
```

```
-10 10
10 -10
```

mult method

```
1 l=10
2 r=-10
3 print(l,r) #10,-10
4 l=l*r      #-100,-10
5 r=l/r      #-100,10
6 l=l/r      #
7 print(l,r)
```

```
10 -10
-10.0 10.0
```

div method

```
1 l=10
2 r=-10
3 print(l,r) #10,-10
4 l=l/r      #-1,-10
5 r=l*r      #-1,10
6 l=l*r      #
7 print(l,r)
```

```
10 -10
-10.0 10.0
```

```
1 l=10 #assume left hand right hand mobile
2 r=20
3 temp=l
4 l=r
5 r=temp
6 print(l,r)
```

```
20 10
```

WAP to find armstrong number

```
1 a=int(input("enter 3 digit number "))
2 au=a%10 #unit digit
3 at = (a%100)//10
4 ah=a//100 #hundred digit
5 print(ah,at,au)
```

```
enter 3 digit number153
1 5 3
```

```

1 if (ah**3 + at**3 + au**3 == a ) :
2     print(a," is armstrong number ")
3 else :
4     print(a," is not armstrong number ")

```

153 is armstrong number

11. Python pgm to count alphabets, digits and special characters in a string

```

1 str = 'abc1234$%(@^'
2 al = 0
3 dg= 0
4 sp = 0
5 for i in range(len(str)) :
6     if(str[i].isalpha()) :
7         al+=1
8     elif(str[i].isdigit()) :
9         dg+=1
10 sp = len(str)- al-dg
11 print(al,dg,sp)

```

3 4 5

12. Python program to count occurrence of a character in a string

```

1 str="SWAROOP"
2 str.count('O')

```

2

3.create integer,float,complex number with variable? print what type of number it is =(type())

```

1 i=3
2 f=4.0
3 c= complex(i,f)
4 print(c,type(c))

```

(3+4j) <class 'complex'>

4.palindrome program

```

1 x=input("enter word to check palindrome ")
2 if(x==x[::-1]) :
3     print("pal")

```

```
4 else :
    enter word to check palindrome asa
    pal
```

```
1 #no reverse func for string , only for list
```

```
7.print odd numbers using list comprehension?
```

```
1 x=range(10)
2 y=[ele for ele in x if ele%2==1]
3 y

[1, 3, 5, 7, 9]
```

18. PROGRAM TO PRINT MISSING VALUES IN A LIST

```
1 l1 = [1,5,6,7,11,14]
2
3 print("l1",l1)
4
5 l2 = [ele for ele in range(max(l1)) if ele not in l1]
6 print("l2",l2)

l1 [1, 5, 6, 7, 11, 14]
l2 [0, 2, 3, 4, 8, 9, 10, 12, 13]
```

WRITE THE OUTPUT OF THE FOLLOWING

A0 = DICT(ZIP(('A','B','C','D','E'),(1,2,3,4,5))) A1 = RANGE(10) A2 = SORTED([I FOR I IN A1 IF I IN A0])
A3 = SORTED([A0[S] FOR S IN A0]) A4 = [I FOR I IN A1 IF I IN A3] A5 = {I:I FOR I IN A1} A6 = [[I,I] FOR I IN A1] PRINT(A0,A1,A2,A3,A4,A5,A6)

```
1 A0 = dict(zip(('A','B','C','D','E'),(1,2,3,4,5)))
2 A0
```

```
{'A': 1, 'B': 2, 'C': 3, 'D': 4, 'E': 5}
```

```
1 A1 = range(10)
2 A1 #it wont print 0,1,2---8,9
```

```
range(0, 10)
```

```
1 A2 = sorted([I for I in A1 if I in A0])
2 A2
```

```
[]
```

```
1 A3 = sorted([A0[S] for S in A0])
2 A3
```

```
[1, 2, 3, 4, 5]
```

```
1 A4 = [I for I in A1 if I in A3]
2 A4
```

```
[1, 2, 3, 4, 5]
```

```
1 A5 = { I:I*I for I in A1 }
2 A5
```

```
{0: 0, 1: 1, 2: 4, 3: 9, 4: 16, 5: 25, 6: 36, 7: 49, 8: 64, 9: 81}
```

```
1 A6 = [ [I,I*I] for I in A1 ]
2 A6
```

```
[[0, 0],
 [1, 1],
 [2, 4],
 [3, 9],
 [4, 16],
 [5, 25],
 [6, 36],
 [7, 49],
 [8, 64],
 [9, 81]]
```

Question No 8: write a program to check whether it is prime number or not?

```
1 x=11
2 for i in range(2,x) :
3     if(x%i)==0 :
4         print(x,"is not prime")
5         break
6 else :
7     print(x,"is prime")
```

```
11 is prime
```

17. PROGRAM TO DISPLAY ONLY EVEN NUMBERS

```
1 x=[1,2,3,4,5,6,7,8]
2 y = [ele for ele in x if ele%2 == 0]
3 y
```

```
[2, 4, 6, 8]
```

