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TOPIC:- Python program beginner Level Interview Question With Solutions

2 add two number

[1]:
```
num1=35
num2=45
print("the sum of two number is",num1+num2)
```

```
the sum of two number is 80
```

[9]:
```
# user input
l1=int(input("enter l1 number"))
l2=int(input("enter l2 number"))
print("the sum of l1 and l2=",l1+l2)
```

```
enter l1 number45
enter l2 number35
the sum of l1 and l2= 80
```

[10]:
```
l1=float(input("enter l1 number"))
l2=float(input("enter l2 number"))
print("the sum of l1 and l2=",l1+l2)
```

```
enter l1 number35.6
enter l2 number45.6
the sum of l1 and l2= 81.2
```

3 find and calculate SquareRoot program

[18]:
```
num=64
square=num**(1/2)# formula of square
print("the square of num is :",square)
```

```
the square of num is : 8.0
```

[19]:
```
l1=int(input("enter a number"))
sr=l1**(1/2)##  ** use for power of number
print("the square of number",sr)
```

```
enter a number49
the square of number 7.0
```

[23]:
```
### using maths module
import math
l1=float(input("enter a number"))
sr=math.sqrt(l1)  ## inbulit formula in python module
print("square root of l1:",sr)
```

```
enter a number64.5
square root of l1: 8.031189202104505
```

4 claculate the area of triangle

[2]:
```
height=float(input("Enter the area of height"))
base=float(input("Enter the area of base "))
area=(1/2)*height*base
print("area of triangle:",area)
```

```
Enter the area of height12
Enter the area of base 12
area of triangle: 72.0
```

5 swap two vairable

[19]:
```
x=12
y=13
x,y=y,x
print(x,y)
```

```
13 12
```

[3]:
```
# using third variable
x=13
y=12
temp=13
print(temp)
x=y
print(x)
y=temp
print(y)
```

```
13
12
13
```

6 kilometer to miles

[1]:
```
# 1km = 0.621371 miles
l1=int(input("enter a km:"))
miles=l1*0.621371
print("km to miles",miles)
```

```
enter a km:10
km to miles 6.21371
```

7 chek number is postive, negative ,zero

[10]:
```
l1=int(input("enter a number"))
if l1>0:
    print("postive")
elif l1<0:
    print("negative")
else:
    print("zero")
```

```
enter a number0
zero
```

[15]:
```
l1=int(input("enter a number"))
if l1>0:
    print("postive")
elif l1== 0:
    print("zero")
else:
    print("negative")
```

```
enter a number-6
negative
```

8 chek year leap year

year=365 leap year=366 – once in 4 year *condication of leap year only for centure ex-2000,3000,4000, year%400==0 and year%100==0* non centure year ex= 1865,1996,1940,1996,2008,2020 year%4==0 and year%100!=0

[43]:
```
year = int(input("enter a year"))
```

```
if(year%400 == 0) and (year%100==0):
    print(year, "is leap year")

elif(year%4 == 0) and (year%100!=0):## non centure year
    print(year, "is leap year")

else:
    print(year,"is not leap year")
```

```
enter a year1957
1957 is not leap year
```

9 Find the largest among three number

requerment 1= variable 2=condication if,else elif etc 3=opratoroes and , or ,not

[6]:
```
num1=34
num2=25
num3=47
if num1>num2 and num1>num3:
    print("num1 grater than both num2 and num3")
elif num2>num1 and num2>num3:
    print("num largest number both")
else:
    print("num 3 largest")
```

```
num 3 largest
```

[2]:
```
num1=(int(input("Enter a number 1::")))
num2=(int(input("Enter a number 2::")))
num3=(int(input("Enter a number 3::")))
if num1>num2 and num1>num3:
    print(num1, "grater than both num2 and num3")
elif num2>num1 and num2>num3:
    print(num2,"largest number both")
else:
    print(num3, "largest")
```

```
Enter a number 1::12
Enter a number 2::134
Enter a number 3::56
134 largest number both
```

10 chek number is prime or not

prime number 1 3 5 7 11 37 13 etc

[7]:
```
num=int(input("Enter the number"))
if num==1:
    print("it is prime number")
if num>1:
    for i in range(2,num):
        if num % i==0:
            print("it is not prime number")
            break
    else:
        print("prime number")
```

```
Enter the number7
prime number
```

[10]:
```
n=int(input("enter  anumber"))
if n%1==0:
    print("not prime number")
elif n>1:
    for i in range(2,num):
        if i%2==0:
            print(" not prime number")
        else:
            print("Prime number")
```

```
enter  anumber9
not prime number
```

11 Print all prime number in interval

[11]:
```
lower=int(input("Enter a lower number"))
upper=int(input("Enter a upper number"))

for num in range(lower,upper+1):
    if num >1:
        for i in range(2,num):
            if num%i==0:
                break
        else:
                print(num,"prime number")
```

```
Enter a lower number7
Enter a upper number37
7 prime number
11 prime number
13 prime number
17 prime number
19 prime number
```

```
23 prime number
29 prime number
31 prime number
37 prime number
```

12 Genrate random Number

random module use to genrate random number

[9]:
```
import random
num=random.randint(0,10)
print(num)
```

```
7
```

[22]:
```
# like dice game
import random
dice=random.randint(1,6)
dice
```

[22]:
```
6
```

13 convert to celcius to fahrenheit

[77]:
```
temp=int(input("Enter the temprature"))
fehrenheit=temp*1.8+32
print(fehrenheit,"convert value in Fehrenheit")
```

```
Enter the temprature55
131.0 convert value in Fehrenheit
```

14 fahrenheit to celcius

[16]:
```
fer=int(input("Enter the fahernheit="))
celcius=((fer-32)*5)/9
print(celcius," celcius")
# celcius=((fr-32)*5)/9
```

```
Enter the fahernheit=55
12.777777777777779  celcius
```

[1]:
```
# QR code ganrate
import qrcode as qr
img=qr.make("https://www.youtube.com/")
img.save("youtube")
```

15 Find the factorial of number

like 5!=5*4*3*2*1=120 4!=4*3*2*1=24 hint factorial me negative number nahi hote negative number ka factorial nahi nikala jata 0!=1

[1]:
```
num=int(input("Enter a number"))

fact=1
# condicatons we use for factorial
if num < 0:
    print("factorial of less than 0 doest not exist")

if num==0:
    print("factorail of 0 is ",1)
if num>0:
    for i in range(1,num+1):
        fact=fact*i
print("the factorial of hiven number is",fact)
```

```
Enter a number5
the factorial of hiven number is 120
```

[12]:
```

```

```
enter a number5
1
```

[3]:
```
# using  Recursion  find factorial
#with help of call the fucation itself

def fact(a):
    if a==0:
        return 1
    else:
        return((a)*fact(a-1))

num=int(input("enter a factorial here "))
result=fact(num)
print("the factorial of given number",result)
```

```
enter a factorial here 5
the factorial of given number 120
```

16 python program to multipication of table

[2]:
```
n=int(input("Enter a number"))
for i in range(1,11):
    print(n,"x",i,"=",n*i)
```

```
Enter a number5
5 x 1 = 5
5 x 2 = 10
5 x 3 = 15
5 x 4 = 20
5 x 5 = 25
5 x 6 = 30
5 x 7 = 35
5 x 8 = 40
5 x 9 = 45
5 x 10 = 50
```

[1]:
```
n=7
i=1
while i<=10:
    print(n,"x",i,"=",n*i)
    i=i+1
```

```
7 x 1 = 7
7 x 2 = 14
7 x 3 = 21
7 x 4 = 28
7 x 5 = 35
7 x 6 = 42
7 x 7 = 49
7 x 8 = 56
7 x 9 = 63
7 x 10 = 70
```

17 print Fibonacci sequence

fibonacci seaquence is like 0,1,2,3,4 so 0+1=1,1+1=2,2+2=4,4+3=7,7+4=11 this type of seaquace pattern is fibonacci seaquace

[59]:
```
# a and b are alredy defind
a=0
b=1
num=int(input("enter a number to obatain fibonacci sequence:"))

if num==1:
    print(a)
```

```
else:
    print(a)
    print(b)
    for i in range(1,num):
        c=a+b
        a=b
        b=c
        print(c)
```

```
enter a number to obatain fibonacci sequence:7
0
1
1
2
3
5
8
13
```

18 program to chek armstrongs number

like 153 (1*1*1)+(5*5*5)+(3*3*3) 1+125+27=153 this amstrong number like 53 5*5+3*3 25+9=34 this is not amstrong number

[1]:
```
num = int(input("Enter a number: "))

# initialize sum
sum = 0

# find the sum of the cube of each digit
temp = num  # temp=tempraorey
while temp > 0:
   digit = temp % 10 # list digit store kr na he digit ke andr lik 153 so 3␣
 ↪store krna he
   cube  = digit ** 3
   sum=sum+cube

   temp //= 10

# display the result
if num == sum:
   print(num,"is an Armstrong number")
else:
   print(num,"is not an Armstrong number")
```

```
Enter a number: 153
153 is an Armstrong number
```

[13]:

```
Enter a number: 153
num
```

19 nth number to chek amstong

[8]:

```
num = int(input("Enter a number: "))
order=len(str(num))

# initialize sum
sum = 0

# find the sum of the cube of each digit
temp = num
while temp > 0:
   digit = temp % 10  # list digit store kr na he digit ke andr lik 153 so 3␣
 ↪store krna he
   sum += digit ** order
   temp //= 10

# display the result
if num == sum:
   print(num,"is an Armstrong number")
else:
   print(num,"is not an Armstrong number")
```

```
Enter a number: 1569
1569 is not an Armstrong number
```

20 find the sum of natural naumber

[ ]:

```
# natural number all postive number
```

[8]:

```
n=int(input("Enter a number"))
if n<0:
    print("plse enter a postive  number ")
else:
    sum=0 #5 +4 +3+2+1=15
    while n>0:# 5 4 3 2 1
        sum+=n
        n-=1
print(sum)
```

```
Enter a number5
15
```

Python Program to Display Powers of 2 Using Anonymous Function

** Anonymous Funaction** lamda funcation is Anonymous Funcation Becacuse its temporary funaction means Isko alag se difine kr ne ki jarurat nahi padti hamre satament ke sath he work karta he kam memory ka use karta he

Map fuanction particualr " srting ke lenth count find kr tah he aur usko list formate print kr deta he"

[9]:
```
n=int(input("enter a number"))
result=list(map(lambda x:2**x,range(n+1))) # n=5 # 5 4 3 2 1
print(result)
```

```
enter a number5
[1, 2, 4, 8, 16, 32]
```

[25]:
```
n=2
for i in range(0,5+1):
    k=(n**i)
    print([k],end="")
```

```
[1][2][4][8][16][32]
```

[28]:
```
n=int(input("enter a number"))
result=list(map(lambda x:2**x,range(n+1))) # n+1=5 # 5 4 3 2 1
print(result)

for i in range(n+1):

    print("the value of 2 raised to powe",i,"is",result[i])
```

```
enter a number5
[1, 2, 4, 8, 16, 32]
the value of 2 raised to powe 0 is 1
the value of 2 raised to powe 1 is 2
the value of 2 raised to powe 2 is 4
the value of 2 raised to powe 3 is 8
the value of 2 raised to powe 4 is 16
the value of 2 raised to powe 5 is 32
```

Python Program to Find Numbers Divisible by Another Number

[45]:
```
for i in range(1,100):
    if i%13==0:
        k=i
        print(k,end=" ")
        print(list[k],end=" ")
```

```
13 list[13] 26 list[26] 39 list[39] 52 list[52] 65 list[65] 78 list[78] 91
list[91]
```

[49]:
```
l=[39,79,48,49,88]
r=list(filter(lambda x : x%13==0,l)) # l=x for lambda
print(r)
```

```
[39]
```

Convert Decimal to Binary, Octal, and Hexadecimal

[51]:
```
d= int(input("enter a number"))
print(bin(d))
print(oct(d))
print(hex(d))
#  decimal 0 to 9
# bin ,oct ,hex is python inbulit function
```

```
enter a number5
0b101
0o5
0x5
```

Python Program to Find ASCII Value of Character

ord() inbulit Funaction python

[56]:
```
char= input("Enter a charcater")
print("Ascii of value of",char,"is",ord(char))
```

```
Enter a charcatera
Ascii of value of a is 97
```

[6]:
```
for i in range(1,5):
    for j in range(1,10):
        if j>=5-i and j<=3+i:
            print("*",end="")
        else:
            print("",end=" ")
    print()
```

```
   *
  ***
 *****
*******
```

[4]:
```
for i in range(1,6):
    print(" * "*i)
for y in range(5,0,-1):
    print(" * "*y)
```

```
 *
 *  *
```

```
*  *  *
*  *  *  *
*  *  *  *  *
*  *  *  *  *
*  *  *  *
*  *  *
*  *
*
```

[17]:
```
for i in range(5,0,-1):
    print("*"*i)
```

```
*****
****
***
**
*
```

[19]:
```
for i in range(1,6):
    k=6-i
    for j in range(1,6):
        if j<=6-i:
            print(k,end=" ")
            k-=1
        else:
            print(" ",end="")
    print()
```

```
5 4 3 2 1
4 3 2 1
3 2 1
2 1
1
```

Python Program to Check Prime Number - Complete Guide | Python Tutorial

[35]:
```

```

```
enter a number1
prime Number
```

[ ]:
```
n= int( input("enter a number"))
if n==1:
    print("prime Number")
elif n%2==0:
    print("not prime number")
else:
    print(" prime number")
```

[ ]:
```
num=int(input("Enter the number"))
if num==1:
    print("it is prime number")
if num>1:
    for i in range(2,num):
        if num % i==0:
            print("it is not prime number")
            break
    else:
        print("prime number")
```

[48]:
```
for i in range(1,12):
    for j in range(2,i):
        if i %2==0:
            break
        else:
            l.append(i)
print(l)
```

```
[3, 5, 5, 5, 7, 7, 7, 7, 7, 9, 9, 9, 9, 9, 9, 9, 11, 11, 11, 11, 11, 11, 11, 11,
11]
```

[4]:
```
## revesre string
a=input("enter word")
while len(a):
    print(a[::-1])
    break
```

```
enter wordI love YOU
UOY evol I
```

[7]:
```
l=[1,2,3]
l.reverse()
print(l)
```

```
[3, 2, 1]
```

[3]:
```
a=input("enetr a word ")[::-1]
print(a)
```

```
enetr a word Rohit
tihoR
```

[2]:
```
###Program to find reverse of a string
a=input("Enter String:")
for i in range((len(a)-1),-1,-1):
        print(a[i],end="")
```

```
Enter String:hello
olleh
```

[ ]: