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#Python  P1 Write a python program that asks the user to enter their name and their age and Print
 # out a message   addressed to them that tells them the year that they will turn 100 years old.

 from datetime import date
name=input("Enter your name:")
print(name)
age=input("Enter age")
age=float(age)
print(age)
year=100-age
print(year)
# creating the date object of today's date
todays_date = date.today()
  # printing todays date
print("Current date: ", todays_date)
# fetching the current year, month and day of today
print("You will be 100 years old in year : ",int(todays_date.year+year))
```

```
#Python P2 : Write a program to check whether the number is even or odd, print out an appropriate
# message to the user

c=input("Enter a number to check even or odd:")
c=int(c)
print(c)
if c%2 == 0:
   print(c,"is Even")
else:
   print(c,"is Odd")
```

```
#Python P3: Write a program which will find all such numbers which are divisible by 7.

endno=input("Enter end number upto which you want to find all numbers which are divisible by 7:")
print(endno)
e=int(endno)
for i in range(1, e,1):
   if i%7==0:
      print("Numbers divisible by 7 is :",i)
```

```
#python P4 :Write a program that takes a list of numbers (for example, a = [5, 10, 15, 20, 25]) and
# makes a new list of only the first and last elements of the given list. Write this code inside a
# function.

c = [5, 10, 15, 20, 25]
print ("Old list:",c)
def firstLast (a):
   new_list = [(a[0],a[-1])]
   print ("New List: ",new_list)
firstLast(c)
```

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python P5: Write a program that returns a list that contains only the elements that are common between the lists (without duplicates). Make sure your program works on two lists of different sizes.
Find common elements in both lists.

```
list1=[6,7,8,233,44,233,700]
list2=[8,55,99,233,233,7]
if len(list1)==len(list2):
   print("Lists have same length")
else:
   print("Lists do not have same length")
   print(" Common elements in both lists ")
   print(set(list1).intersection(list2))
```

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python P6: Write a program (using functions!) that asks the user for a long string containing multiple words. Print back to the user the same string, except with the words in backwards order.
E.gif input is “ I am Msc student” output is : ”student Msc am I”

```
inputString = input("Enter you string : ")
print(inputString)
inputString = inputString.split(" ")
print(inputString)
inputString.reverse()
inputString = " ".join(inputString)
print(inputString)
```

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python P7: Write a Python program to solve the Fibonacci sequence using recursion.

```
def fibbonci(n):
   if n in {0,1}:
      return n
   else:
      return (fibbonci(n-1)+fibbonci(n-2))
no=int(input("Enter number of terms upto which fibbonci series to print: "))
for i in range(0,no,1):
   print(fibbonci(i))
```

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python P8: Write a Python program to copy the contents of a file to another file

```
with open('first.txt','r') as firstfile, open('second.txt','a') as secondfile:
   for line in firstfile:
      secondfile.write(line)
print("done successfully")
```

```
# python P9: Write a Python class named Circle constructed by a radius and two methods whichwill
#compute the area and the perimeter of a circle

class Circle():

   def radius(self,radius):
      r = radius
   def area(self,r):
      area = 3.142*r*r
      print("Area of the circle is: ",area)
   def peri(self,r):
      peri = 2*3.14*r
      print("Perimeter of the circle is: ",peri)

obj = Circle()
radius = int(input("Enter the radius of circle: "))
obj.area(radius)
obj.peri(radius)
```

```
# python P10: Write a program that prints out all the elements of the list that are less than 10
list1=[1,7,8,2,99,56,3]
for x in list1:
   if x<10:
      print(x)
```

```
# python P11: Write a program that accepts a sentence & calculate the number of letters and digits.

s = input("Input a string: ")
d=l=0
for c in s:
   if c.isdigit():
      d=d+1
   elif c.isalpha():
         l=l+1
   else:
         pass
print("Letters", l)
print("Digits", d)
```

```
# python P12: Write a Python program to count the number of lines in a text file.
with open("first.txt", 'r') as fp:
   lines = len(fp.readlines())
print('Total Number of lines:', lines)
```