**CO1 PROGRAMS**

**Q2)** **Display future leap years from current year to a final year entered by user.**

a=int(input("enter start year:"))

b=int(input("enter end year:"))

if(a<b):

print("leap year are:",end="")

for i in range(a,b):

if i%4==0 and i%100!=0:

print(i,end=" ")

**OUTPUT:**

enter start year:2000

enter end year:2010

leap year are:2004 2008

**Q3)** **List comprehensions:**

**a)** **•Generate positive list of numbers from a given list of integers**

for i in [-19,20,90,-56,87]:

if i>=0:

print(i)

**OUTPUT:**

20

90

87

**b)** **•Square of N number**

n=int(input("enter the limit:"))

for i in range(1,n+1):

s=i\*i

print(s)

**OUTPUT:**

enter the limit:5

1

4

9

16

25

**c)** **•Form a list of vowels selected from a given word**

c=str(input("enter a word:"))

print("orginal word:",c)

print("vowels are")

for i in c:

if i in "aeiouAEIOU":

print([i])

**OUTPUT:**

enter a word:sithara

orginal word: sithara

vowels are:

['i']

['a']

['a']

**Q6)** **Store a list of first names. Count the occurrences of ‘a’ within the list**

List=["a","b","c"]

p=List.count("a")

print(p)

**OUTPUT:**

1

**Q8)** **Get a string from an input string where all occurrences of first character replaced with ‘$’, except first character. [eg: onion -> oni$n]**

str1="malayalam"

char=str1[0]

str1=str1.replace(char,"$")

str1=char+str1[1:]

print(str1)

**OUTPUT:**

malayala$

**Q9) Create a string from given string where first and last characters exchanged. [eg: python -> nythop]**

str=input("enter a string:")

newstr=str[-1:]+str[1:-1]+str[:1]

print(newstr)

**OUTPUT:**

enter a string:python

nythop

**Q10)** **Accept the radius from user and find area of circle.**

r=float(input("Enter the radius:"))

area=3.14\*r\*r

print("area=",area)

**OUTPUT:**

Enter the radius2

area= 12.56

**Q11)** **Find biggest of 3 numbers entered**

a=int(input("enter 1st no:"))

b=int(input("enter 2nd no:"))

c=int(input("enter 3rd no:"))

if(a>b and a>c):

print(a,"is the largest")

elif(b>c):

print(b,"is the largest")

elif(c>a):

print(c,"is the largest")

**OUTPUT:**

enter 1st no:56

enter 2nd no:12

enter 3rd no:4589

4589 is the largest

**Q12)** **Accept a file name from user and print extension of that**

n1=input("Enter file name:")

f=n1.split(".")

print("extension of file is:"+f[-1])

**OUTPUT:**

Enter file name:python.java

extension of file is: java

**Q14)** **Accept an integer n and compute n+nn+nnn**n=input("enter a number:")

a=int("%s" %n)

b=int("%s%s" %(n,n))

c=int("%s%s%s" %(n,n,n))

print("n + nn + nnn:",a+b+c)

**OUTPUT:**

enter a number:5

n + nn + nnn :615

**Q15)** **Print out all colors from color-list1 not contained in color-list2.**

l1=set(["red","blue","green","white"])

l2=set(["red","blue","green","orange"])

print(l1.difference(l2))

**OUTPUT:**

{'white'}

**Q16)** **Create a single string separated with space from two strings by swapping the character at position 1.**a="python"

b="java"

q=a[0]

p=b[0]

c=b[0]+a[1:len(a)]+ " " +a[0]+b[1:len(b)]

print(c)

**OUTPUT:**

jython pava

**Q19)** **Find gcd of 2 numbers.**

x= int(input("Enter 1st number: "))

y= int(input("Enter 2nd number: "))

i = 1

while(i <= x and i <= y):

if(x % i == 0 and y% i == 0):

gcd = i

i = i + 1

print("GCD :", gcd)

**OUTPUT:**

Enter 1st number: 10

Enter 2nd number: 8

GCD : 2

**Q20)** **From a list of integers, create a list removing even numbers.**

num = [7,8, 120, 25, 44, 20, 27]

print( "Original list:",num)

num = [x for x in num if x%2!=0]

print("list after removing Even numbers:",num)

**OUTPUT:**

Original list: [7, 8, 120, 25, 44, 20, 27]

list after removing Even numbers: [7, 25, 27]