**Day 02 python programs**

**CSA0818**

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**#01**

**Progrm to print right triangle**

Code:

rows = 5

for i in range(0, rows):

for j in range(0, i + 1):

print("\*", end=' ')

print("\r")

sample

input: 5

output:

**\***

**\* \***

**\* \* \***

**\* \* \* \***

**\* \* \* \* \***

**#02**

**Progrm to print left triangle**

Code:

rows = 5

for i in range(0, rows):

for j in range(0, i + 1):

print("\*", end=' ')

print("\r") sample

input:5

output:

\*

\* \*

**\* \* \***

**\* \* \* \***

**\* \* \* \* \***

**#03**

**Program to print pascal triangle**

Code:

def print\_pascal\_triangle(n):

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

C = 1

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

print(C, end=" ")

C = C \* (line - i) // i

print()

# Number of rows for Pascal's Triangle

rows = 5

print\_pascal\_triangle(rows)sample

input:5

output:

1

1 1

1 2 1

1 3 3 1

1. 4 6 4 1

**#04**

**Program to remove duplicate elements in the list**

Code:

A=[1,2,3,3,2,1,2,3,3,3,4,3,2,4]

B=set(a)

C=list(b)

Print(c)

sample

input: A=[1,2,3,3,2,1,2,3,3,3,4,3,2,4]

output: c=[1,2,3,4]

**#05**

**Programe to print the duplicate elements and how many times its repeated**

Code:

a=[1,2,3,4,5,5,3,3,2,2]

b=set(a)

for i in b:

count=a.count(i)

if count>1:

print(f"{i} is present {count}times")

sample

input: a=[1,2,3,4,5,5,3,3,2,2]

output:

2 is present 3times

3 is present 3times

5 is present 2times

**#06**

**Program to frequency of characters in a given string**

Code:

inpu="sssrrrrmamam"

count={i:inpu.count(i) for i in inpu}

print(count)

sample

input:

inpu="sssrrrrmamam"

output:

{'s': 3, 'r': 4, 'm': 3, 'a': 2}

**#07**

**Program to reverse a string using slicing**

Code:

A=”sarmash vali”

B=a[::-1]

Print(b)

input: A=”sarmash vali”

output: ilav hsamras

**#08**

**Progrm to concanate two strings without using + symbol**

Code:

str1 = "Hello, "

str2 = "World!"

concatenated\_string = str1.join([str2])

print(concatenated\_string)

input:

str1 = "Hello, "

str2 = "World!"

output: Hello World

**#09**

**Program checking valid email**

Code:

s=input("enter your email\n")

if '@' in s and "email.com" in s:

print(f"{s} is a valid email")

else:

print(f"{s} is not valid email")

input:

ssvssv453@email.com

output:

[ssvssv453@email.com](mailto:ssvssv453@email.com) is a valid email

**#10**

Program **to print the number of vowels and consonants present in string**

Code:

def count\_vowels\_and\_consonants(input\_string):

vowels = "aeiouAEIOU"

vowel\_count = 0

consonant\_count = 0

for char in input\_string:

if char.isalpha():

if char in vowels:

vowel\_count += 1

else:

consonant\_count += 1

return vowel\_count, consonant\_count

input\_string = "Hello, World!"

vowels, consonants = count\_vowels\_and\_consonants(input\_string)

print("Number of vowels:", vowels)

print("Number of consonants:", consonants)

input:2004

output: 2004 is a leap year.