**CYCLE 1**

**PROGRAM 1**

**Aim** : Program to print greetings message

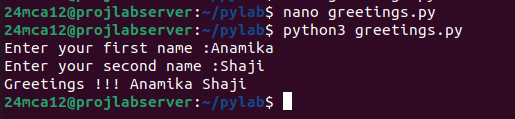
**Source code :**

first\_name=input("Enter your first name :")

second\_name=input("Enter your second name :")

print(f"Greetings !!! {first\_name} {second\_name}")

**Output :**

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**PROGRAM 2**

**Aim :** Program to demonstrate diffrent number datatypes

**Source code :**

int\_num=10

float\_num=10.5

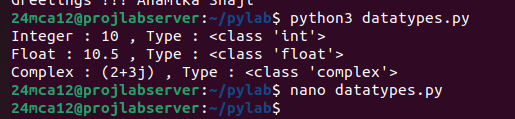
complex\_num=2+3j

print(f"Integer : {int\_num} , Type : {type(int\_num)}")

print(f"Float : {float\_num} , Type : {type(float\_num)}")

print(f"Complex : {complex\_num} , Type : {type(complex\_num)}")

**Output :**

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**PROGRAM 3**

**Aim :** Program to calculate area of circle

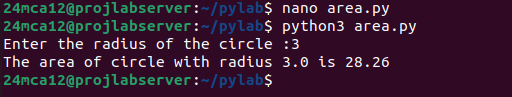
**Source code :**

radius=float(input("Enter the radius of the circle :"))

area=3.14\*radius\*\*2

print(f"The area of circle with radius {radius} is {area}")

**Output :**

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**PROGRAM 4**

**Aim :** Program to calculate the salary of an employee

**Source code :**

basic\_pay=float(input("Enter the basic pay :"))

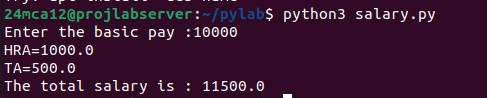
hra=0.10\*basic\_pay

ta=0.05\*basic\_pay

total\_salary=basic\_pay+hra+ta

print(f"HRA={hra}\nTA={ta}\nThe total salary is : {total\_salary}")

**Output :**

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**PROGRAM 5**

**Aim :** Program to perform arithmetic operations on 2 integers

**Source code :**

num1=int(input("Enter first number :"))

num2=int(input("Enter second number :"))

print(f"Addition : {num1+num2}")

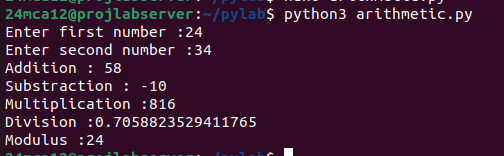
print(f"Substraction : {num1-num2}")

print(f"Multiplication :{num1\*num2}")

print(f"Division :{num1/num2}")

print(f"Modulus :{num1%num2}")

**Output :**

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**PROGRAM 6**

**Aim :** Program to print n copies of a given string

**Source code :**

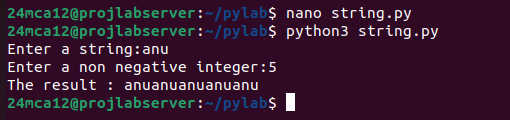
string=input("Enter a string:")

n=int(input("Enter a non negative integer:"))

result= string\*n

print(f"The result : {result}")

**Output :**

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**PROGRAM 7**

**Aim :** Program to accept an integer and compute n+nn+nnn

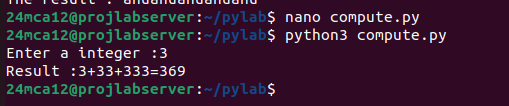
**Source code :**

n=int(input("Enter a integer :"))

result=n+(n\*10+n)+(n\*100+n\*10+n)

print(f"Result :{n}+{n}{n}+{n}{n}{n}={result}")

**Output :**

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**PROGRAM 8**

**Aim :** Program to find biggest of 3 numbers

**Source code :**

num1=int(input("Enter first number :"))

num2=int(input("Enter second number :"))

num3=int(input("Enter third number :"))

if num1>num2 & num1>num3:

print(f"{num1} is biggest.")

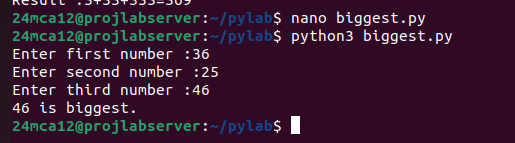
elif num2>num3:

print(f"{num2} is biggest.")

else:

print(f"{num3} is biggest.")

**Output :**

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**PROGRAM 9**

**Aim :** Program to determine whether a year is leap year or not

**Source code :**

year=int(input("Enter the year :"))

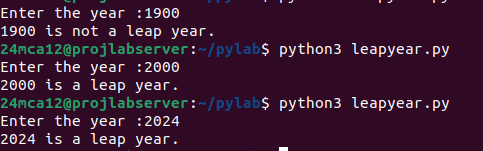
if(year%400==0) or (year%100!=0 and year%4==0):

print(f"{year} is a leap year.")

else:

print(f"{year} is not a leap year.")

**Output :**

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**PROGRAM 10**

**Aim :** Program to determine the rate of entry ticket in a trade fair based on age.

**Source code :**

age=int(input("Enter your age :"))

if age<10:

rate=7

elif age>=10 and age<60:

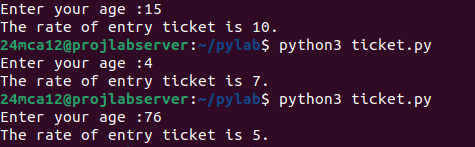
rate=10

else:

rate=5

print(f"The rate of entry ticket is {rate}.")

**Output :**



**PROGRAM 11**

**Aim :** Program to solve a quadratic equation

**Source code :**

import math

a=float(input("Enter coefficient of a :"))

b=float(input("Enter coefficient of b :"))

c=float(input("Enter coefficient of c :"))

d=b\*\*2-4\*a\*c

if d>0:

root1=(-b+math.sqrt(d))/(2\*a)

root2=(-b-math.sqrt(d))/2\*a

print(f"The roots are real and different : {root1} {root2}")

elif d==0:

root=-b/(2\*a)

print(f"The roots are real and same :{root}")

else:

real=-b/(2\*a)

imaginary=(math.sqrt(-d))/(2\*a)

print(f"Equation has Two complex roots {real}+{imaginary}i and {real}-{imaginary}i")

**Output :**

