PROGRAM 1

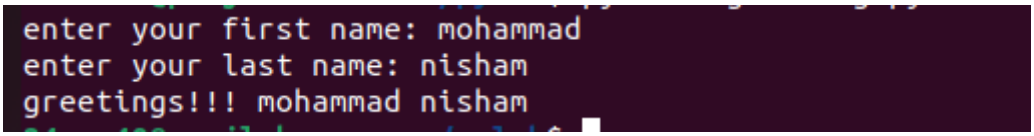
AIM

program to display greeting message

SOURCE CODE

```
fname=input("enter your first name: ")
lname=input("enter your last name: ")
print("greetings!!!",fname,lname)
```

OUTPUT



PROGRAM 2

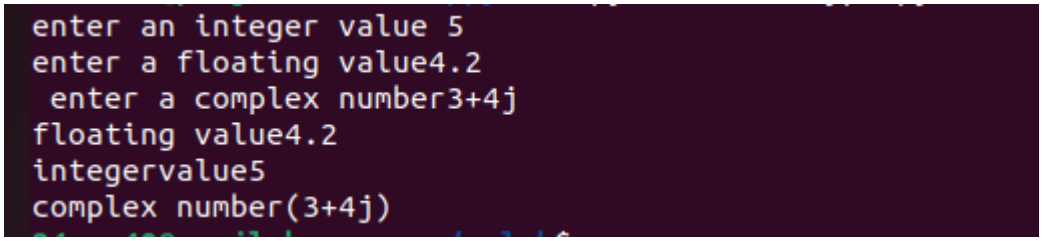
AIM

program to demonstrate different number data type

SOURCE CODE

```
i=int(input("enter an integer value "))
f=float(input("enter a floating value"))
co=complex(input(" enter a complex number"))
print(f"floating value{f}\nintegervalue{i}\ncomplex number{co}")
```

OUTPUT



PROGRAM 3

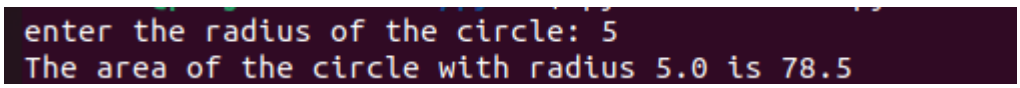
AIM

program to calculate the area of a circle

SOURCE CODE

```
radius=float(input("enter the radius of the circle: "))
area=3.14*radius**2
print(f"The area of the circle with radius {radius} is {area}")
```

OUTPUT



PROGRAM 4

AIM

program to demonstarate the salary of the employee

SOURCE CODE

```
basicpay=float(input("enter the basic pay of employee :"))
hra=.10*basicpay
ta=.05*basicpay
salary=basicpay+hra+ta
print("salary of the employee is ",salary)
```

OUTPUT

```
enter the basic pay of employee :5000
salary of the employee is  5750.0
```

PROGRAM 5

AIM

program to perform arithemetic operations on two integers

SOURCE CODE

```
=int(input("enter first number :"))
y=int(input("enter second number :"))
print("sum=",x,"+",y,"=",x+y)
print("difference=",x,"-",y,"=",x-y)
print("multiplication=",x,"*",y,"=",x*y)
print("division=",x,"/",y,"=",x/y)
print("remainder=",x,"%",y,"=",x%y)
```

OUTPUT

```
enter first number :100
enter second number :100
sum= 100 + 100 = 200
difference= 100 - 100 = 0
multiplication= 100 * 100 = 10000
division= 100 / 100 = 1.0
remainder= 100 % 100 = 0
```

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

```
enter a string: nisham
enter a non-negative integer :3
the result :nishamnishamnisham
```

PROGRAM 7

AIM

program to accept an integer n 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

```
enter a integer :3
result :3+33+333=369
```

PROGRAM 8

AIM

program to find the biggest of 3 numbers

SOURCE CODE

```
n1=int(input("enter your first number :"))
n2=int(input("enter your second number :"))
n3=int(input("enter your third number :"))
if n1>n2 and n1>n3:
    print(f"{n1} is the biggest")
elif n2>n3 and n2>n1:
    print(f"{n2} is the biggest")
else:
    print(f"{n3} is the biggest")
```

OUTPUT

```
enter your first number :10
enter your second number :20
enter your third number :30
30 is the biggest
```

PROGRAM 9

AIM

write a program to determine whether a year is leap year or not

SOURCE CODE

```
yr=int(input("enter a year :"))
if yr%4==0 and yr%100!=0:
    print("leap year")
elif yr%400==0:
    print("leap year")
else:
    print("not a leap year")
```

OUTPUT

```
enter a year :2024
leap year
```

PROGRAM 10

AIM
write a program to demonstrate the rate of entry tickets in trade fair based on age as follows;
age>=60 ticket rate=5
age 60-10 ticket rate=10
age<10 ticket rate=7

SOURCE CODE
```
age=int(input("enter the age :"))
if age>=60:
    print("ticket rate=5")
elif age<60 and age>=10:
    print("ticket rate=10")
else:
    print("ticket rate=7")
```

OUTPUT

```
enter the age :15
ticket rate=10
```

PROGRAM 11
AIM
Write a program to solve quadratic equation
SOURCE CODE
```
import math,cmath
print("Quadratic equation solver : ax^2 + bx + c = 0")
a=float(input("Enter coefficiant of x^2(a):"))
b=float(input("Enter coefficiant of x(b):"))
c=float(input("Enter constant value (c):"))

d = (b**2) - (4*a*c)
if d<0:
        sol1=(-b-cmath.sqrt((b**2)-4*a*c))/(2*a)
        sol2=(-b+cmath.sqrt((b**2)-4*a*c))/(2*a)

elif d==0:
        x=(-b)/(2*a)
        print(f"Equation has one solution:{x}")
else:
        sol1=(-b-cmath.sqrt((b**2)-4*a*c))/(2*a)
        sol2=(-b+cmath.sqrt((b**2)-4*a*c))/(2*a)
        print(f“Equation has two solutions : {sol1},{sol2}”)
```

OUTPUT

```
Quadratic equation solver:ax^2 + bx + c = 0
Enter coefficiant of x^2(a):1
Enter coefficiant of x(b):2
Enter constant value (c):1
Equation has one solution:-1.0
```