

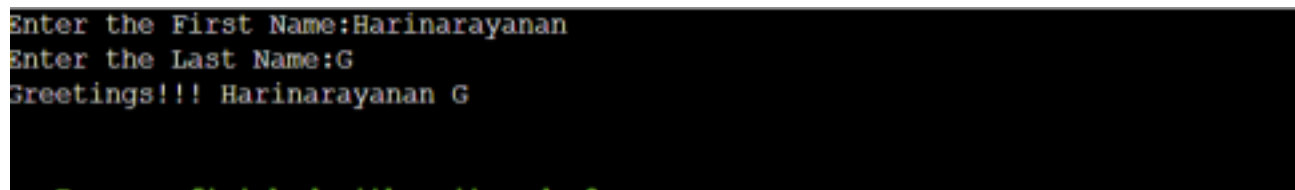
PROGRAM-1

AIM: Write a program that prompts the user to enter his first name and last name and then displays a message "Greetings!!! First name Last name".

SOURCE CODE:

```
fn=input("Enter the First Name:")  
ln=input("Enter the Last Name:")  
print("Greetings!!!",fn,ln)
```

OUTPUT:

A screenshot of a terminal window with a black background and green text. It shows the execution of the program with inputs 'Harinarayanan' and 'G', resulting in the output 'Greetings!!! Harinarayanan G'.

```
Enter the First Name:Harinarayanan  
Enter the Last Name:G  
Greetings!!! Harinarayanan G
```

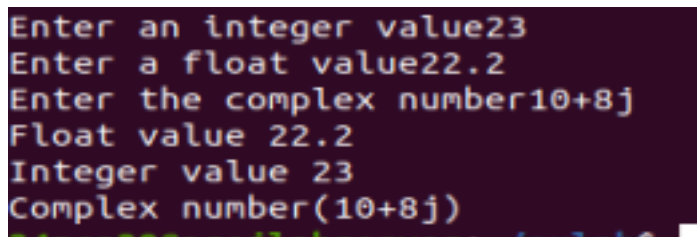
PROGRAM-2

AIM: Write a program to demonstrate different number data types in python?

SOURCE CODE:

```
i=int(input("Enter an integer value"))
f=float(input("Enter a float value"))
co=complex(input("Enter the complex number"))
print(f"Float value {f} \nInteger value {i}\nComplex number{co}")
```

OUTPUT:



```
Enter an integer value23
Enter a float value22.2
Enter the complex number10+8j
Float value 22.2
Integer value 23
Complex number(10+8j)
```

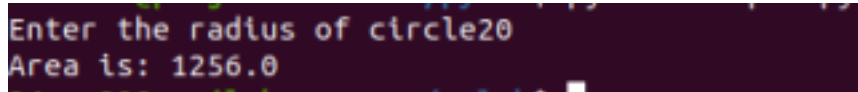
PROGRAM-3

AIM: Write a program to calculate the area of a circle by reading inputs from the user.

SOURCE CODE:

```
r=float(input("Enter the radius of circle"))  
pi=3.14  
ar=pi*r**2  
print("Area is:",ar)
```

OUTPUT:

A screenshot of a terminal window with a dark background. It shows the program's execution: the prompt "Enter the radius of circle" is followed by the user input "20". The next line shows the output "Area is: 1256.0".

```
Enter the radius of circle20  
Area is: 1256.0
```

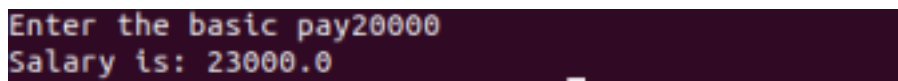
PROGRAM-4

AIM: Write a program to calculate the salary of an employee given his basic pay (to be entered by the user) . HRA = 10 percent of the basic pay, TA = 5 percent of the basic pay.

SOURCE CODE:

```
p=float(input("Enter the basic pay"))  
hra=10/100*bp  
ta=5/100*bp  
sal=hra+bp+ta  
print("Salary is:",sal)
```

OUTPUT:

A screenshot of a terminal window showing the program's execution. The first line shows the prompt 'Enter the basic pay' followed by the user input '20000'. The second line shows the output 'Salary is: 23000.0'.

```
Enter the basic pay20000  
Salary is: 23000.0
```

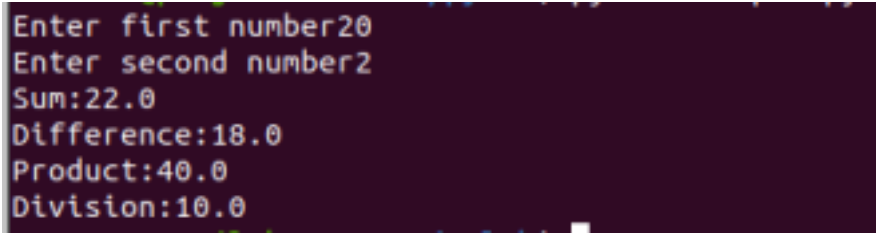
PROGRAM-5

AIM: Write a Python program to perform arithmetic operations on two integer numbers.

SOURCE CODE:

```
n1=float(input("Enter first number"))
n2=float(input("Enter second number"))
print(f"Sum:{n1+n2}\nDifference:{n1-n2}\nProduct:{n1*n2}\nDivision:{n1/n2}")
```

OUTPUT:



```
Enter first number20
Enter second number2
Sum:22.0
Difference:18.0
Product:40.0
Division:10.0
```

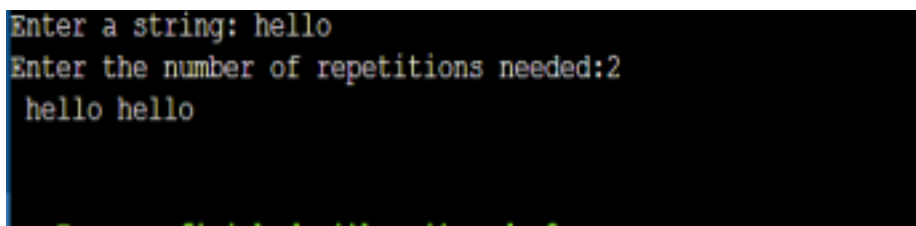
PROGRAM-6:

AIM: Write a Python program to get a string which is n (non-negative integer) copies of a given string

SOURCE CODE:

```
s=input("Enter a string:")  
r=int(input("Enter the number of repetitions needed:"))  
print(s*r)
```

OUTPUT:



```
Enter a string: hello  
Enter the number of repetitions needed:2  
hello hello
```


PROGRAM-7

AIM: Program to accept an integer n and compute $n+nn+nnn$.

SOURCE CODE:

```
n=input("Enter a integer:")  
print(n,'+',n*2,'+',n*3)  
sum=int(n)+int(n*2)+int(n*3)  
print("sum is",sum)
```

OUTPUT:

A screenshot of a terminal window with a dark purple background. It shows the execution of the program with the input '20'. The output consists of three lines: 'Enter a integer:20', '20 + 2020 + 202020', and 'sum is 204060'.

```
Enter a integer:20  
20 + 2020 + 202020  
sum is 204060
```

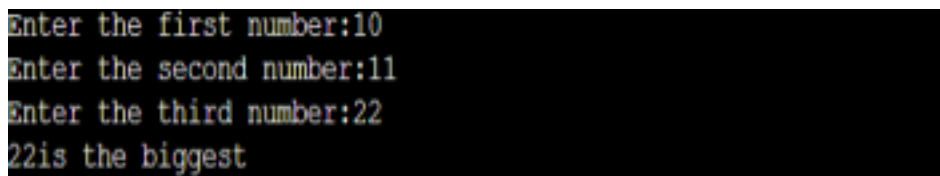
PROGRAM-8

AIM: Find the biggest of 3 numbers entered.

SOURCE CODE:

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

OUTPUT:

A screenshot of a terminal window with a black background and light blue/green text. It shows the execution of the program with three input numbers: 10, 11, and 22. The output indicates that 22 is the largest number.

```
Enter the first number:10
Enter the second number:11
Enter the third number:22
22is the biggest
```

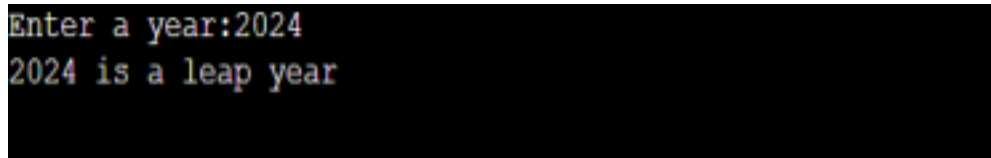

PROGRAM-9

AIM: Program to determine whether a year is a leap year or not.

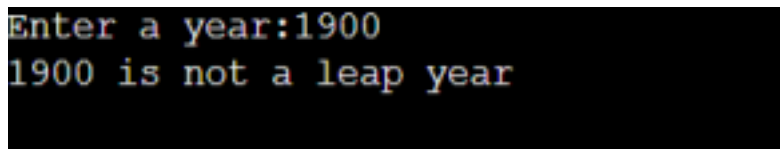
SOURCE CODE:

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

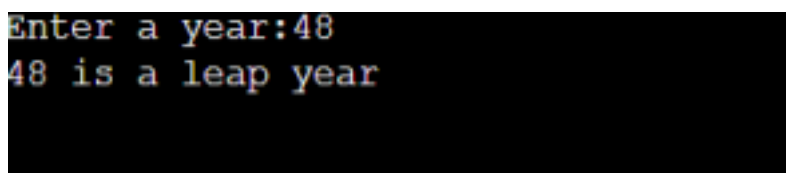
OUTPUT:



```
Enter a year:2024
2024 is a leap year
```



```
Enter a year:1900
1900 is not a leap year
```



```
Enter a year:48
48 is a leap year
```

PROGRAM-10

AIM: Write a Python program to determine the rate of entry-ticket in a trade fair based on age as follows:

Age	Rate
<10	7
>=10 and <60	10
>= 60	5

SOURCE CODE:

```
age=int(input("Enter the age:"))
if age<10:
    print("Rate is:7")
elif age>=10 and age<60:
    print("Rate is:10")
elif age>=60:
    print("Rate is:5")
else:
    print("Invalid age")
```

OUTPUT:

```
Enter the age:21
Rate is:10
```

```
Enter the age:6
Rate is:7
```

```
Enter the age:64
Rate is:5
```

PROGRAM-11

AIM: Write a Python program to solve a quadratic equation.

SOURCE CODE:

```
import math
a=float(input("Enter the first number:"))
b=float(input("Enter the second number:"))
c=float(input("Enter the third number:"))
d=(b*b)-(4*a*c)
if d==0:
    root=-b/2*a
    print(f"Real and equal roots:{root}")
elif d>0:
    ans1=(-b-math.sqrt(d))/(2*a)
    ans2=(-b+math.sqrt(d))/(2*a)
    print(f"Real and distinct roots:{ans1} {ans2}") else:
    re=-b/2*a
    img=math.sqrt(abs(d))/(2*a)
    print(f"Complex and distinct roots:{re}+{img}j")
```

OUTPUT:

```
Enter the first number:1
Enter the second number:6
Enter the third number:8
Real and distinct roots:-4.0 -2.0
```

```
Enter the first number:1
Enter the second number:-2
Enter the third number:1
Real and equal roots:1.0
```

```
Enter the first number:1
Enter the second number:2
Enter the third number:5
Complex and distinct roots:-1.0+2.0j
```