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Experiment No.1

Aim:- Write a C++ program to calculate the area of the circle.

Objective:
To learn the basic structure of C++

Software used - Linux Operating System, gcc

Concept: Basic function available in C++ language

Theory: This is the simplest program to display the area of the square.
i) cout: It is used to display the content on the screen.
ii) Cin: To take input from the user.
iii) variables: variable are used to store the value

Algorithm:
i) Start
ii) Declare two variable one for side & another for area.
iii) Take input from the user
iv) Display the area
v) End

Input:
Enter the radius:-
5

Output: Area of circle is 78.5

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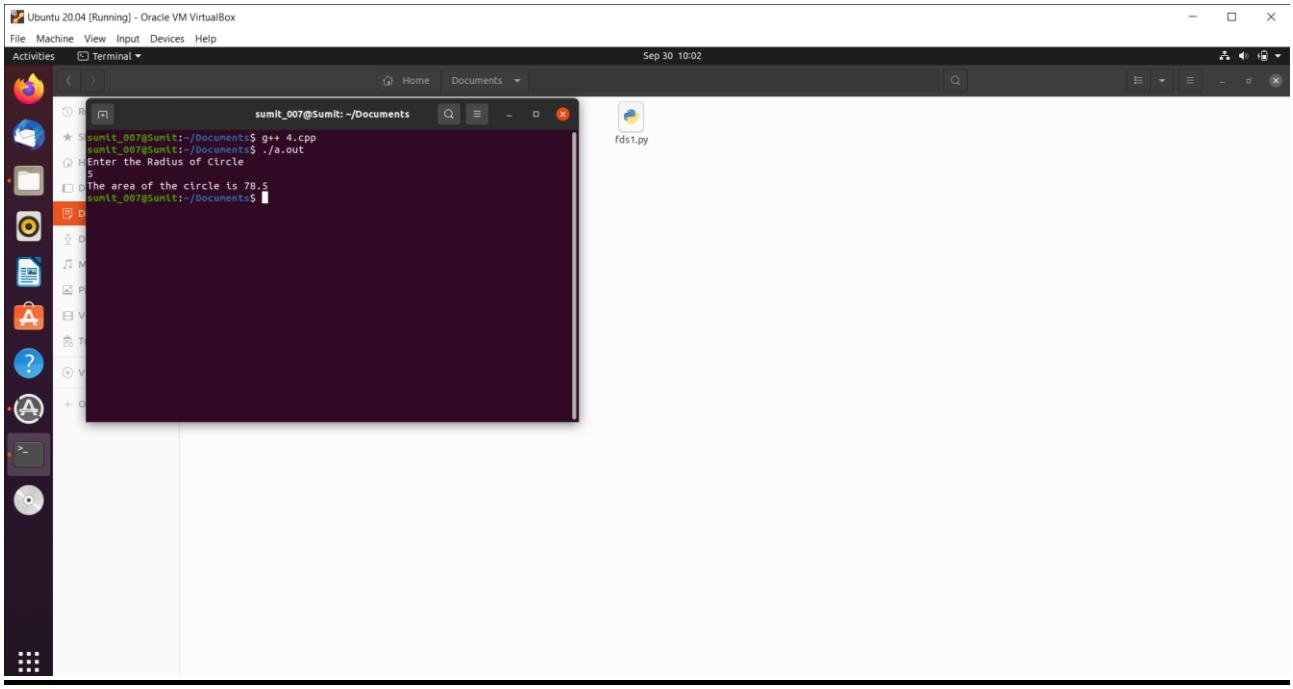
Conclusion:

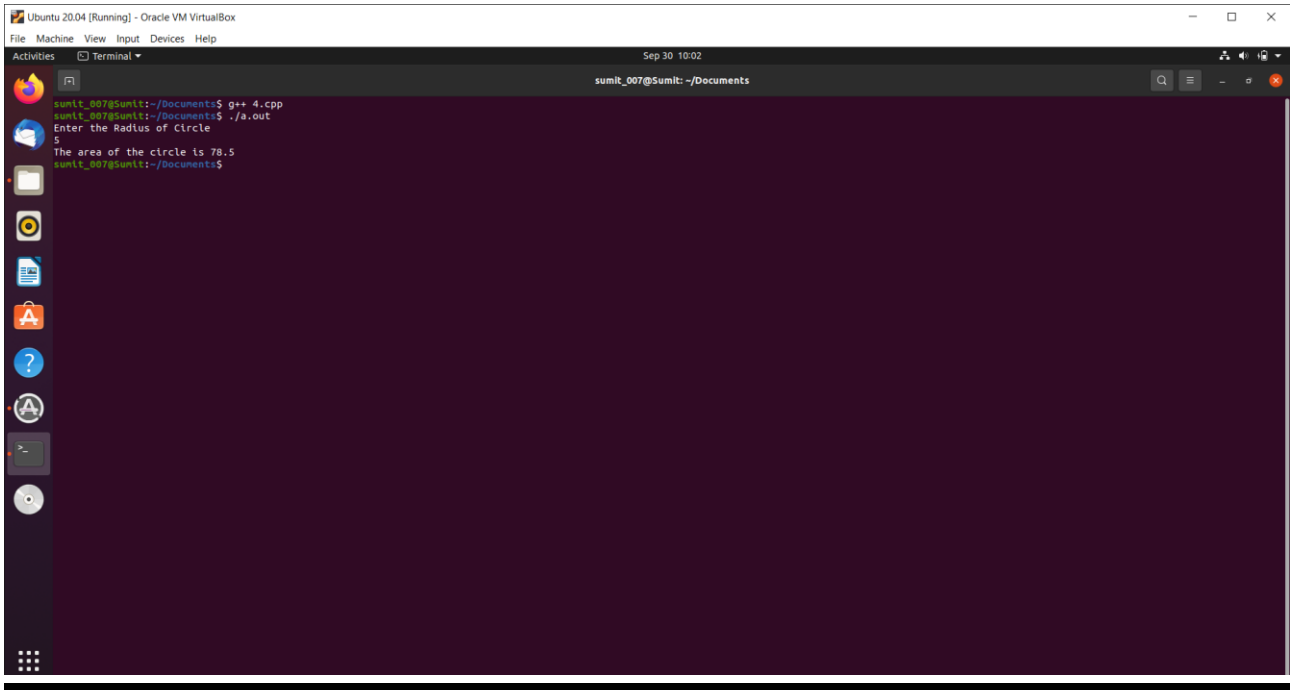
Now, we are familiar with the basic syntax of C++ language.

Write a program to calculate the area of circle:

```
#include<iostream>
using namespace std;
int main()
{
  //declare vairable type float
  float a,area;
  // Input the radius and save it in 'a'
  cout<<"Enter the Radius of Circle"<<endl;
  cin>>a;
  if (a >= 0)
    {

  //calculate the area of the circle
  area=3.14*a*a;
  // Display the area of the Circle

  cout<<"The area of the circle is "<<area<<endl;
    }
  else
    {
      cout<<"Radius Cannot Be negative"<<endl;
    }


  return 0;
}
```

OUTPUT:


Ubuntu 20.04 [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Activities
Terminal
Sep 30 10:02
Home
Documents
sumit_007@Sumit: ~/Documents
sumit_007@Sumit:~/Documents$ g++ 4.cpp
sumit_007@Sumit:~/Documents$ ./a.out
Enter the Radius of Circle
5
The area of the circle is 78.5
sumit_007@Sumit:~/Documents$
fds1.py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Enter the Radius of Circle
5
The area of the circle is 78.5
sumit_007@Sumit:~/Documents$

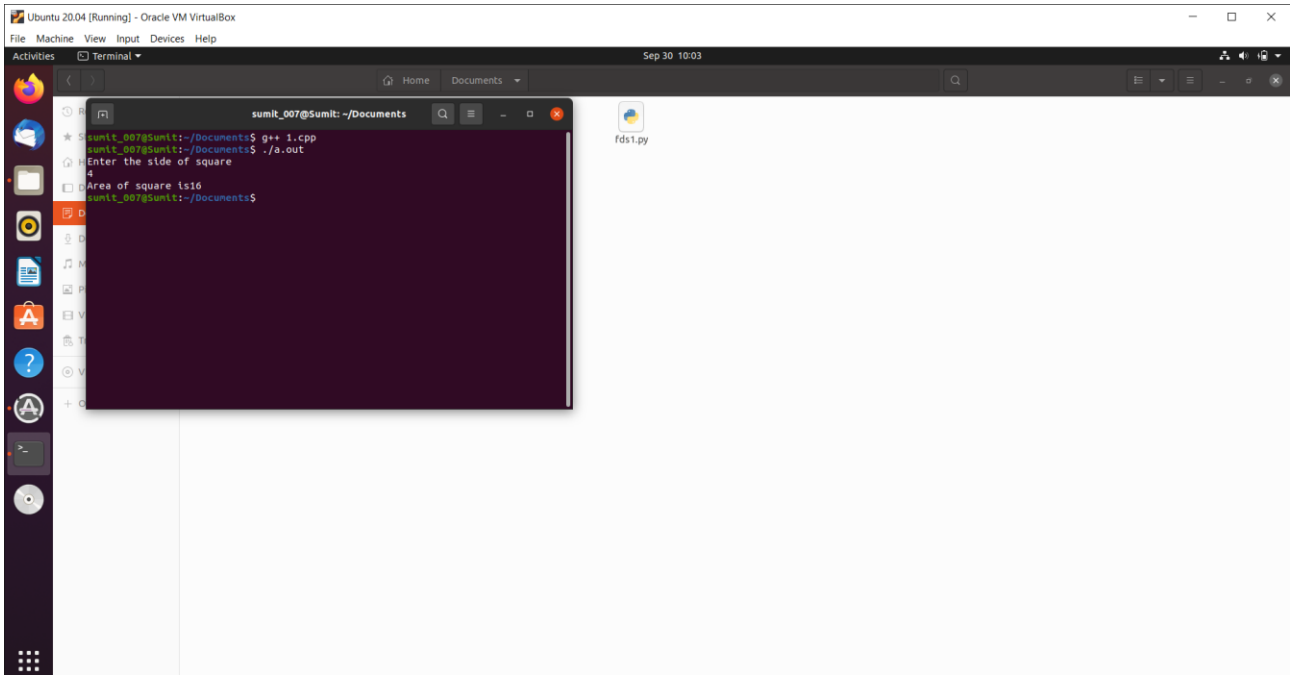
Write a program to calculate the area of square:

```
#include<iostream>
using namespace std;

int main()
{
    //declear vairable type float
    float a,area;
    //Input the side and store it in ‘a’
    cout<<"Enter the side of square"<<endl;
    cin>>a;
    if (a >= 0){
    area=a*a;
    cout<<"Area of square is"<<area<<endl;
    }
    else
   {
    cout<<”Side cannot be negative”;
    }

    return 0;
}
```

OUTPUT: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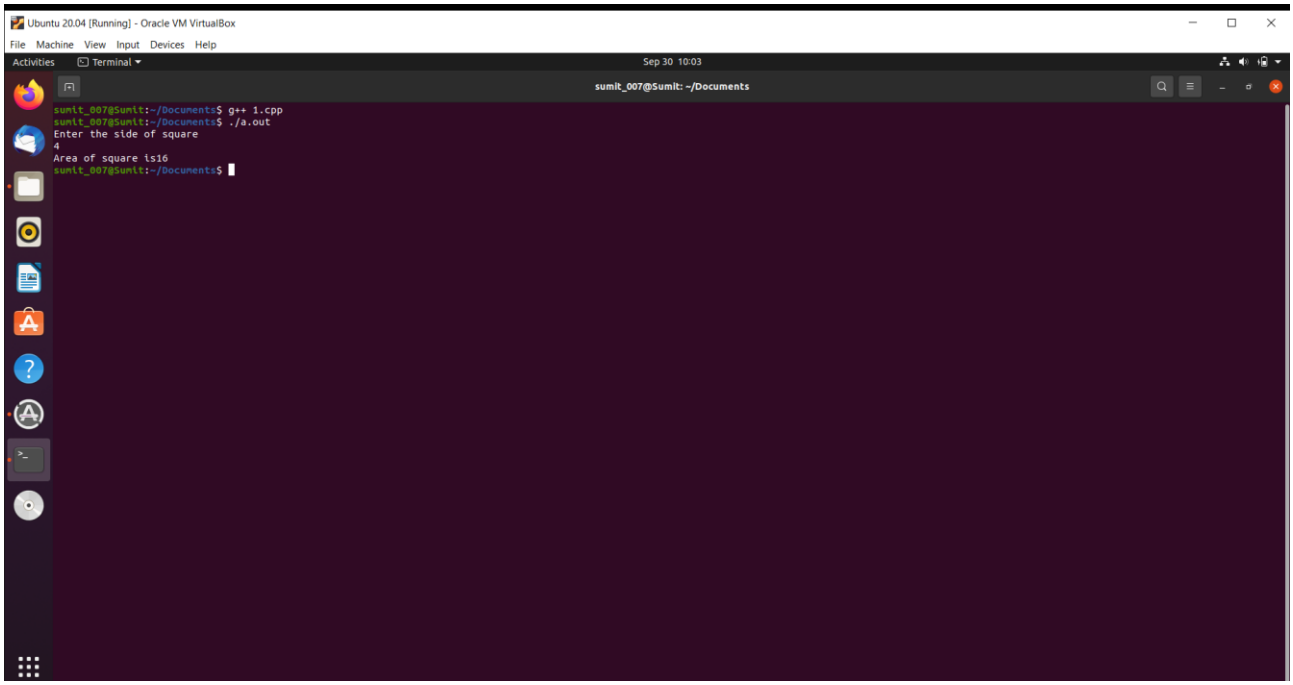
Activities
Terminal
Sep 30 10:03
Home
Documents
sumit_007@Sumit: ~/Documents
sumit_007@Sumit:~/Documents$ g++ 1.cpp
sumit_007@Sumit:~/Documents$ ./a.out
Enter the side of square
4
Area of square is16
sumit_007@Sumit:~/Documents$
fds1.py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