**Program 2**

Pseudocode

* Include the file header **cmath** for mathematical functions
* Declare a constant Pi using the specifier **const**
* Use the sqrt (value)function for square root of Pi
* Prompt the user to enter the value of radius to a variable of type double , **cin >> r;**
* Use **pow(base,exp)** function for formula of surface area and volume of sphere

Program code

#include <iostream>

#include <cmath> //for mathematical functions

using namespace std;

int main()

{

    cout << "\n\tProgram for Sphere\n";

    const double PI = 3.1419; //declaring a constant PI

    cout << "Root(PI) = " << sqrt(PI) << endl; //display the root(PI)

    double r; //radius variable

    cout << "Enter the radious of sphere : ";

    cin >> r; //collected any user radius value

    double surfaceArea = 4\*PI\*pow(r, 2); //calculating the surface area

    double volume = (4/3)\*PI\*pow(r, 3); //calculating the volume

    cout << "\nSurface area = " << surfaceArea << endl;

    cout << "Volume = " << volume << endl;

    return 0;

}

**Screen Dump**

