5. Implement a C++ program to demonstrate the concept of data abstraction using the concept of class and objects.

**SOURCE CODE:**

```
#include<iostream>
#include<string>
using namespace std;
class room
 {
   private:
   double length;
   double width;
   double height,calarea,calvol;
   public:
   void area()
   {
      cout<<"Enter the length: ";
      cin>>length;
      cout<<"Enter the width: ";
      cin>>width;
      cout<<"Enter the height: ";
      cin>>height;
      calarea=2*(length+width+height);
   }

   void vol()
   {
      calvol=length*width*height;
   }

   void display()
   {
      cout<<"AREA: "<<calarea<<endl;
      cout<<"VOLUME: "<<calvol<<endl;
   }
 };
  int main()
  {
    room r;
    r.area();
    r.vol();
    r.display();
}
```

```
OUTPUT  PROBLEMS  DEBUG CONSOLE  PORTS  TERMINAL                                                    Code

PS C:\Users\ayush\OneDrive\Desktop\coding> cd "c:\Users\ayush\OneDrive\Desktop\coding\Ayush Godiyal Roll No 20\" ; if ($?) { g++ vol.cpp -o vol } ; if ($?) { .\vol }
Enter the length: 5
Enter the width: 2
Enter the height: 4
AREA: 22
VOLUME: 40
PS C:\Users\ayush\OneDrive\Desktop\coding\Ayush Godiyal Roll No 20>
```