**PROGRAMS :Create a class called Box with data member length,breadth and height. Use setter and getter functions and display the volume and surface area of different box objects.**

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**//class to store box objects**

**#include<iostream>**

**using namespace std;**

**class box**

**{**

**int length,breadth,height;**

**int surfaceArea,volume;**

**public:**

**void setBoxValue(int len=0,int bre=0,int ht=0){**

**length=len;**

**breadth=bre;**

**height=ht;**

**}**

**int getLength(){return length;}**

**int getBreadth(){return breadth;}**

**int getHeight(){return height;}**

**void calcVolAndSurfaceArea(){**

**surfaceArea=2\*(length\*breadth+breadth\*height+length\*height);**

**volume=length+breadth+height;**

**}**

**int getSurfaceArea(){return surfaceArea;}**

**int getVolume(){return volume;}**

**};**

**int main()**

**{**

**box boxes[20];**

**int n,i;**

**int tempLen,tempBred,tempHeight;**

**cout<<"Enter the number of box objects"<<endl;**

**cin>>n;**

**for(i=0;i<n;i++){**

**cout<<"Enter the Length Breadth and Height of the box"<<endl;**

**cin>>tempLen>>tempBred>>tempHeight;**

**boxes[i].setBoxValue(tempLen,tempBred,tempHeight);**

**boxes[i].calcVolAndSurfaceArea();**

**}**

**cout<<"The surface area and volume of the different boxes are"<<endl;;**

**for(i=0;i<n;i++){**

**cout<<i+1<<".Surface Area of box "<<i+1<<":"<<boxes[i].getSurfaceArea()<<endl;**

**cout<<" .Volume of box "<<i+1<<":"<<boxes[i].getVolume()<<endl;**

**}**

**return 0;**

**}**

Input:

2

3 2 1

5 4 3

Output:

