## 2222001971

```
e program can calculate the area of a reactangle, the area of circle or volume of a cylinder run the program enter:
To find the area of rectangle.
To find the area of circle.
To find the area of circle.
To for the area of cylinder.
To the contract of the program
OUTPUT
                               Enter the length and width of rectangle
                                Area = 25.00
To run the program enter:
1: To find the area of rectangle.
2: To find the area of circle.
3: To find the area of cylinder.
1: To terminate the program
                                nter the radius of circle
                               Area = 113.11
To run the program enter:
1: To find the area of rectangle.
2: To find the area of circle.
3: To find the area of cylinder.
-1: To terminate the program
                                Enter the radius and height of cylinder
                                olume = 1005.41
o run the program enter:
: To find the area of rectangle.
: To find the area of circle.
: To find the area of cylinder.
1: To terminate the program
                                  .Program finished with exit code 0 ess ENTER to exit console.
CODING
                               #include <iostream>
                               #include <iomanip>
                               using namespace std;
                               const double PI = 3.1419;
                               double rectangle(double I,double w);
                               double circle(double r);
                               double cylinder(double bR,double h);
                               int main()
                                   double radius, height;
                                   int choice;
                                   cout<<fixed<<showpoint<<setprecision(2)<<endl;</pre>
                                   cout<<"The program can calculate the area of a reactangle, "
                                       <<"the area of circle or volume of a cylinder"<<endl;
                                   cout<<"To run the program enter: "<<endl;
                                   cout<<"1: To find the area of rectangle. "<<endl;
                                   cout<<"2: To find the area of circle. "<<endl;
                                   cout<<"3: To find the area of cylinder. "<<endl;
```

```
cout<<"-1: To terminate the program "<<endl;
 cin>>choice;
 cout<<endl;
 while(choice != -1){
    switch(choice){
    case 1:
        double length, width;
        cout<<"Enter the length and width of rectangle "<<endl;</pre>
        cin>>length>>width;
        cout<<endl;
        cout<<"Area = "<<rectangle(length,width)<<endl;</pre>
        break;
    case 2:
        cout<<"Enter the radius of circle"<<endl;
        cin>>radius;
        cout<<endl;
        cout<<"Area = "<<circle(radius)<<endl;</pre>
    case 3:
        cout<<"Enter the radius and height of cylinder"<<endl;
        cin>>radius>>height;
        cout<<endl;
        cout<<"Volume = "<<cylinder(radius,height)<<endl;</pre>
        break;
    default:
        cout<<"Invalid choice"<<endl;
      cout<<"To run the program enter: "<<endl;
      cout<<"1: To find the area of rectangle. "<<endl;
      cout<<"2: To find the area of circle. "<<endl;
      cout<<"3: To find the area of cylinder. "<<endl;
      cout<<"-1: To terminate the program "<<endl;</pre>
      cin>>choice;
      cout<<endl;
 }
 return 0;
double rectangle(double I, double w){
    return I * w;
 double circle(double r){
```

```
return PI*r*r;//not w it should be r
}

double cylinder(double bR, double h){
    return PI*bR*bR*h;
}
```