```
1  using System;
2
3  namespace A2KwangjinBaekP2
4  {
5      class Program
6      {
7          static void Main(string[] args)
8          {
9              // This program calculates Area of a square, Area of a triangle,
                 Volume of a cube, Volume of a sphere.
10
11             // Features an option for the users to choose from followed by input
                 message.
12             Console.Write("Choose 1 ~ 4 from (1. Square, 2. Triangle, 3.Cube 4.
                 Sphere): ");
13             string chooseOption= Console.ReadLine();
14             if (chooseOption == "1")
15             {
16                 Console.Write("Enter 'Length': ");
17                 float areaSquare = (float) Convert.ToDouble (Console.ReadLine());
18                 Console.WriteLine("{0:0.##}", PerformCalcultion(areaSquare));
19             }
20
21             else if (chooseOption == "2")
22             {
23                 Console.Write("Enter 'Base length': ");
24                 double areaTri_1 = Convert.ToDouble(Console.ReadLine());
25                 Console.Write("Enter 'Height': ");
26                 double areaTri_2 = Convert.ToDouble(Console.ReadLine());
27                 Console.WriteLine("{0:0.##}", PerformCalcultion(areaTri_1,
                     areaTri_2));
28             }
29
30             else if (chooseOption == "3")
31             {
32                 Console.Write("Enter 'Length': ");
33                 double volumeCube_1 = Convert.ToDouble(Console.ReadLine());
34                 Console.Write("Enter 'Width': ");
35                 double volumeCube_2 = Convert.ToDouble(Console.ReadLine());
36                 Console.Write("Enter 'Height': ");
37                 double volumeCube_3 = Convert.ToDouble(Console.ReadLine());
38                 Console.WriteLine("{0:0.##}",PerformCalcultion(volumeCube_1,
                     volumeCube_2, volumeCube_3));
39             }
40
41             else if (chooseOption == "4")
42             {
43                 Console.Write("Enter 'Radius': ");
44                 double volumeSphere = Convert.ToDouble(Console.ReadLine());
45                 Console.WriteLine("{0:0.##}",PerformCalcultion(volumeSphere));
46             }
47
```

```
48              else
49              {
50                  Console.WriteLine("Sorry only options from 1 ~ 4 are available");
51              }
52          }
53
54          // Method 1: does the calculation of area of a square.
55          static float PerformCalcultion(float length)
56          {
57              return (length * length);
58          }
59
60          // Method 2: does the calculation of area of a triangle.
61          static double PerformCalcultion(double baseLength, double height)
62          {
63              return (baseLength * height) / 2;
64          }
65
66          // Method 3: does the calculation of volume of a cube.
67          static double PerformCalcultion(double length, double width, double
              height)
68          {
69              return length * width * height;
70          }
71
72          // Method 4: does the calculation of volume of a sphere.
73          static double PerformCalcultion(double radius)
74          {
75              return Math.Pow(radius, 3) * 3.14159 * 4 / 3;
76          }
77      }
78  }
79
```