```
1: #include"dm.h"
 2:
 3: /// member functions of circle class
 5: void circle::get information()
 6: {
 7:
 8:
         cout<<"NAME: "<<setw(8)<<name<<", "<<"PERIMETER: "</pre>
         <<setw(8)<<perimeter<<", "<<"TYPE: circle"<<endl;</pre>
 9:
10: }
11: circle::circle(double r, string s1)
12: {
13:
        r1=r;
14:
        name=s1;
15: }
16: void circle::set perimeter()
17: {
18:
        if(r1<0)
19:
20:
            perimeter=-1;
21:
        }else{
22:
            perimeter=2*3.14*r1;
23:
        }
24:
25: }
26:
27: //member functions of triangle class
28: void triangle::get information()
29: {
30:
         cout<<"NAME: "<<setw(8)<<name<<", "<<"PERIMETER: "</pre>
         <<setw(8)<<perimeter<<", "<<"TYPE: triangle"<<endl;</pre>
31:
32: }
33: triangle::triangle(double side0, double side1, double side2, string s1)
34: {
35:
        sides=new double[3];
36:
        sides[0]=side0;
37:
        sides[1]=side1;
38:
        sides[2]=side2;
39:
        name=s1;
40:
41: }
42: void triangle::set_perimeter()
43: {
        if(sides[0]+sides[1]<=sides[2]||sides[0]+sides[2]<=sides[1]||sides[0]</pre>
44:
45:
       {
46:
            perimeter=-1;
```

```
47:
        }
        else{
48:
49:
            perimeter=sides[0]+sides[1]+sides[2];
50:
51: }
52:
53:
54: //member functions of rectangle class
55: void rectangle::get information()
56: {
57:
58:
         cout<<"NAME: "<<setw(8)<<name<<", "<<"PERIMETER: "</pre>
         <<setw(8)<<perimeter<<", "<<"TYPE: rectangle"<<endl;</pre>
59:
60: }
61: rectangle::rectangle(double side0, double side1, double side2, double s
63:
        sides=new double[4];
        sides[0]=side0;
64:
        sides[1]=side1;
65:
66:
        sides[2]=side2;
67:
        sides[3]=side3;
68:
        name=s1;
69:
70: }
71: void rectangle::set_perimeter()
72: {
73:
        if(sides[0]==sides[2]&&sides[1]==sides[3])
74:
75:
            perimeter=sides[0]+sides[1]+sides[2]+sides[3];
76:
        }
77:
        else{
78:
            perimeter=-1;
79:
        }
80: }
81:
82: /// member functions of square class
83: void square::get_information()
84: {
85:
         cout<<"NAME: "<<setw(8)<<name<<", "<<"PERIMETER: "</pre>
         <<setw(8)<<perimeter<<", "<<"TYPE: square"<<endl;</pre>
86:
87: }
88:
89: square::square(double side0,double side1,double side2,double side3,
90: {
91:
        sides=new double[4];
        sides[0]=side0;
92:
```

```
sides[1]=side1;
93:
94:
         sides[2]=side2;
         sides[3]=side3;
95:
96:
         name=s1;
97: }
98: void square::set_perimeter()
99: {
         if(sides[0]==sides[1]&&sides[1]==sides[2]&&sides[2]==sides[3])
100:
101:
        {
             perimeter=sides[0]+sides[1]+sides[2]+sides[3];
102:
         }
103:
         else{
104:
             perimeter=-1;
105:
106:
         }
107: }
108:
109:
110:
111:
112:
```