

```
1  /*
2  * Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt to
   change this license
3  * Click nbfs://nbhost/SystemFileSystem/Templates/Classes/Class.java to edit this
   template
4  */
5  package proyecto06.herencia;
6
7  /**
8   *
9   * @author miguel.guanira
10  */
11  public class Circulo {
12      private String identificacion;
13      private double radio;
14      private final double PI = 3.141592;
15
16      public Circulo(String identificacion, double radio){
17          this.identificacion = identificacion;
18          this.radio = radio;
19      }
20
21      /**
22       * @return the identificacion
23       */
24      public String getIdentificacion() {
25          return identificacion;
26      }
27
28      /**
29       * @param identificacion the identificacion to set
30       */
31      public void setIdentificacion(String identificacion) {
32          this.identificacion = identificacion;
33      }
34
35      /**
36       * @return the radio
37       */
38      public double getRadio() {
39          return radio;
40      }
41
42      /**
43       * @param radio the radio to set
44       */
45      public void setRadio(double radio) {
46          this.radio = radio;
47      }
48
49      public double area(){
50          return PI*radio*radio;
51      }
52
53      public double perimetro(){
54          return 2*PI*radio;
55      }
56
57      public void imprimeResultados(){
58          System.out.printf("ID : %s\n",identificacion);
59          System.out.printf("Radio: %10.2f\n",radio);
60          System.out.printf("Area : %10.2f\n",area());
61          System.out.printf("Perim: %10.2f\n",perimetro());
62      }
63  }
64
```

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67  * Click nbfs://nbhost/SystemFileSystem/Templates/Classes/Class.java to edit this
    template
68  */
69  package proyecto06.herencia;
70
71  /**
72   *
73   * @author miguel.guanira
74   */
75  public class Cilindro extends Circulo{
76      private double altura;
77
78      public Cilindro(String identificacion, double radio,
79                      double altura){
80          super(identificacion,radio);
81          this.altura = altura;
82      }
83
84      /**
85       * @return the altura
86       */
87      public double getAltura() {
88          return altura;
89      }
90
91      /**
92       * @param altura the altura to set
93       */
94      public void setAltura(double altura) {
95          this.altura = altura;
96      }
97
98      @Override
99      public double area(){ //Area de la superficie
100          return 2*super.area() + perimetro()*altura;
101      }
102
103      public double areaDeLaBase(){
104          return super.area();
105      }
106
107      public double volumen(){
108          return super.area()*altura;
109      }
110
111      @Override
112      public void imprimeResultados(){
113          super.imprimeResultados();
114          System.out.printf("Altura: %10.2f\n",altura);
115          System.out.printf("Superf: %10.2f\n",area());
116          System.out.printf("AreaB: %10.2f\n",areaDeLaBase());
117          System.out.printf("Volumen: %10.2f\n",volumen());
118      }
119  }
120
121  /*
122  * Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt to
    change this license
123  * Click nbfs://nbhost/SystemFileSystem/Templates/Classes/Main.java to edit this
    template
124  */
125  package proyecto06.herencia;
126
```

```
127  /**
128  *
129  * @author miguel.guanira
130  */
131  public class Proyecto06Herencia {
132
133      /**
134       * @param args the command line arguments
135       */
136      public static void main(String[] args) {
137          // TODO code application logic here
138          Circulo circulo1 = new Circulo("Circulo A",56.76);
139          //      circulo1.imprimeResultados();
140
141          System.out.println();
142          Cilindro cilindro = new Cilindro("Cilindro1",6.84,2.65);
143          cilindro.imprimeResultados();
144
145      }
146
147  }
148
```