**this keyword and toString method Example**

**Example part1:**

Create class with name Rectangle which has the following members:

1. Two **public** integer attributes width and height.
2. A constructor that will take two parameters **width** and **height**  then assign the first one to the attribute width and the second one to the attribute height.
3. public method toString which takes no parameters and returns a string that represents the value for width and height for current object.

**sol:**

**public class Rectangle {**

**public int width;**

**public int height;**

**public Rectangle(int width,int height)**

**{**

**this.width=width;**

**this.height=height;**

**}**

**public String toString()**

**{**

**String result;**

**result = "width = "+this.width;**

**result = result+"\n";**

**result = result+"height = "+this.height;**

**return result;**

**}**

**}**

**Example part2:**

In the main method  creat objects from the class rectangle then write a print statement with the object name as parameter. What is the result? Why?

Notes:

* Each class has by default toString() method.
* This method is a built-in method that returns a string representation of an object.
* It is possible to redefine this method as it follows:

**public String toString() {...}**

* The keyword **this** is used to refer to the current object of a class.
* It is used in many cases, for example:
  + • When a parameter of a method has the same name of an attribute, and we need to access the attribute.
  + • When a local variable in a method has the same name of an attribute, and we need to access the attribute within this method.