Using else with the if statement

In all the if statements shown above there are no statements along the false branch. If we need to execute statements if the condition is false then we have to use the optional else clause as follows:

```
System.out.println ("Enter a value: ");
                                                                             Begin
int x = scan.nextInt();
if (x > 4)
                                                                            Input: x
     System.out.println ("true stat 1");
                                                                      False
                                                                                    True
     System.out.println ("true stat 2");
                                                                             x > 4
else
                                                          Output:
                                                                                              Output:
     System.out.println ("false stat 1");
                                                         "false stat 1"
                                                                                             'true stat 1''
System.out.println ("last statement");
                                                                                              Output:
                                                                                            "true stat 2"
                                                                            Output:
                                                                        "always executed"
If the condition is true (i.e. x > 4)
Output: true stat 1, true stat 2, always executed
                                                                             End
```

If the condition is false (i.e. x <= 4)
Output: false stat1, always executed

The same curly braces rules apply to the else clause. It works with only one statement. If more than one statement is needed then curly braces must be used.

Example:

```
System.out.println ("Enter a value: ");
int x = scan.nextInt();
if (x > 4)
{
    System.out.println ("true stat 1");
    System.out.println ("true stat 2");
}
else
{
    System.out.println ("false stat 1");
    System.out.println ("false stat 2");
}
System.out.println ("last statement");
```

I am sure you know the output of the above code.

