Lab8 – Lambda Exercise Solutions

Problem 1

Assign the lambda expressions to a variable of the appropriate type and then express as a method reference. Indicate which type of method reference you are using. Assume that the Employee and EmployeeNameComparator classes are available. To make it easier, do all this inside an Examples class in your workspace. Refer to http://docs.oracle.com/javase/8/docs/api/java/util/function/package-summary.html as necessary.

Solution:

Example:

```
(String x) -> x.toUpperCase()
Function<String, String> toUpper1 = (String x) ->
x.toUpperCase();
Function<String, String> toUpper2 = String::toUpperCase;
```
Method reference type: `Class::instanceMethod`

A. `(Employee e) -> e.getName()`
- *Method reference type:* **`Class::instanceMethod`**

B. `(Employee e,String s) -> e.setName(s)`
- *Method reference type:* **`Class::instanceMethod`**

C. `(String s1,String s2) -> s1.compareTo(s2)`
- *Method reference type:* **`Class::instanceMethod`**

D. `(Integer x,Integer y) -> Math.pow(x,y)`
- *Method reference type:* **`Class::staticMethod`**

E. `(Apple a) -> a.getWeight()`
- *Method reference type:* **`Class::instanceMethod`**

F. `(String x) -> Integer.parseInt(x);`
- *Method reference type:* **`Class::instanceMethod`**

G. `EmployeeNameComparator comp = new EmployeeNameComparator();`
   - *Method reference type:* **`Class::new`**

H. `(Employee e1, Employee e2) -> comp.compare(e1,e2)`
   - *Method reference type:* **`object::instanceMethod`**

Problem 2

Create a method in your Examples class called evaluator. Inside evaluator, evaluate each of your method expressions using input arguments of your own choosing.

Example:

```
void evaluator() {
          System.out.println(toUpper2.apply("hello"));
      ///test your other method references
   }
```

Coding Solution:
Attached in eclipse file name ***'MPP-LambdaExercise'*** inside package **'lab8**