

## Lab 5

### To pass this exercise you must:

- Complete the exercise below
- After completing the task, submit your zipped java source files to Canvas for assessment
- Discuss your work with your tutor for feedback
- Try to get ok from your tutor before you submit by the end of the tutorial

### Exercise

Task:

1. Define a class called `Employee` that will be used represent an employee entity. The class should contain instance variables for name (String), employee ID (Integer) and salary (Double). Include a constructor that takes parameters to initialise the instance variables. Include a getter and a setter method for each variable. Include a `toString()` method that returns a string representation of the employee which should consist all the instance variables.
2. Create a tester class `EmployeeTester` with a main method.
  - 1) Ask for user inputs to create at least 3 employee objects with different values.
  - 2) Use an `ArrayList` object to add each employee object in
  - 3) Call the `toString()` method to display the objects
  - 4) For each object, change the value of a variable that you choose from the three instance variables with the setter method and display the value by calling the getter method.
  - 5) Call the `toString()` method to display the objects by using a loop for the **`ArrayList`** object.

### Submission

Zip your java files and submit the zipped file to the Canvas for assessment.

### Marking scheme

- The employee class (**5 marks**) & the tester class (**5 marks**). Both class should also meet the following requirements:
  1. The employee class is defined as required & the tester class works as required (2 marks).
  2. A proper class header comment should follow java doc style (0.5 marks).
  3. A proper method header comment for each method, which has the following information (1 mark).
    - a) javadoc comment beginning with `/**` and end with `*/`
    - b) purpose of the method.
    - c) `@param` name of the parameter and description (if the method takes a parameter)
    - d) `@return` name of the return variable and description (if the method returns a value)
  4. Readability: name conventions (variable name, constant name, class name), meaningful names, indentation, comments for each variable (0.5 marks).
  5. Keep the user well informed with proper messages (1 mark).