

The code for this practical is in *Practical 10C Files* on Blackboard. Open the files, run the tester and ensure that you understand the code.

Replace traditional **for** loops with *for each* loop where appropriate.

Question 1

Modify the code to add the following operations to the program. The user should be able to select the following options from a menu until the user selects exit.

```
Main Menu
1. View all employees
2. Add an employee
3. Remove an employee
4. Display one employee
5. Display highest paid employee
6. Display lowest paid employee
7. Display total salaries
8. Give raise to an employee
9. No of employee with name beginning with '?'

0. Exit
```

Option 9 will count and display the number of employees whose name begins with a user determined letter.

Build in error checking into your code. Your program should not crash if you try to view an employee that is not in the list. Look at the *isEmpty()* method of *ArrayList* class.

Question 2

Can you spot the repeating code? Options 3, 4 and 8 all depend on finding the employee object based on an `empIdNo` before processing further.

Write a static method called `find()` that will search for an employee based on `idNo`. This method should be in the *Tester* class, not in the *Employee* class.

This method can then be called whenever we need to remove an employee [3], display details for one employee[4] or give a raise to an employee[8].

Should the method take any arguments? Should your method return a value, or an object?