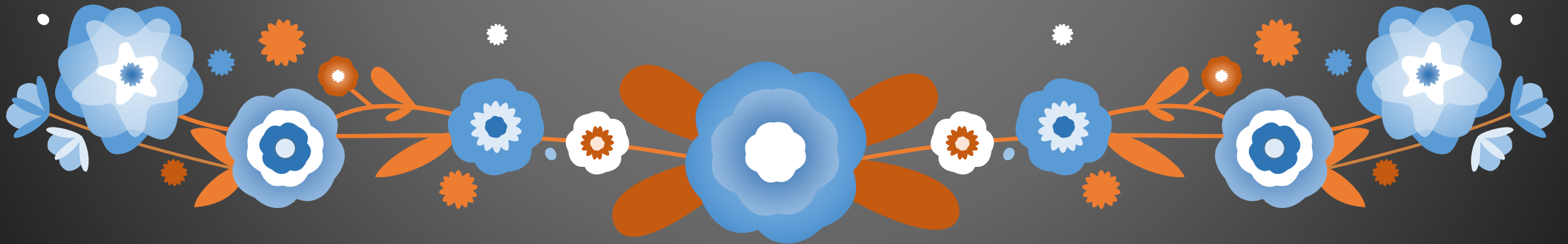# Project

Employee management system

In groups of 2 - 3 you are supposed to write a simple staff management program.
The employees are to supposed to be of different categories you decide but for example, secretaries, technicians, programmers and more…

With this program you should be able to:

➢ Add employees of different kinds
➢ Update employee information
➢ Show information about a specific employee
➢ Remove an employee
➢ Calculate salary and bonus for each employee
➢ Provide statistics of various kinds based on the information we have about the employees.

You have within the group free hands to design the program. It should however at least have one method that is unique to each profession, for example bonus calculation method (apply polymorphism).

Statistics could be any statistical information. You can decide within the group what to do or choose from these suggestions:

➢ Average salary in the company, Overall and in different professions.
➢ Gender distribution in percent, overall and within different professions
➢ Bonus payment overall and in various professional roles.
➢ List the highest and lowest salary in the company.

Main

Your main method should not be to long.

It could basically contain one loop with 3 options.

1. Employee management (add, update, delete)
   Should list a menu for Employee management.

2. Employee statistics
   Should list a menu for Employee management.

3. Exit (set loop condition to false or break the loop)

Employee management

1. Register employee
2. Delete employee
3. Update name of employee
4. Update the birthdate of employee
5. Update the department of employee
6. Update Salary of employee
7. Search employee by name
8. Search employee number
9. Search employee by department
10. Display all employees
0. Back to main menu

Employee statistics

1. Average wage at the company

2. Maximum salary in the company

3. Minimum salary in the company

4. Total bonus

5. Women in percentage in the company

6. Men percentage of the various work role categories
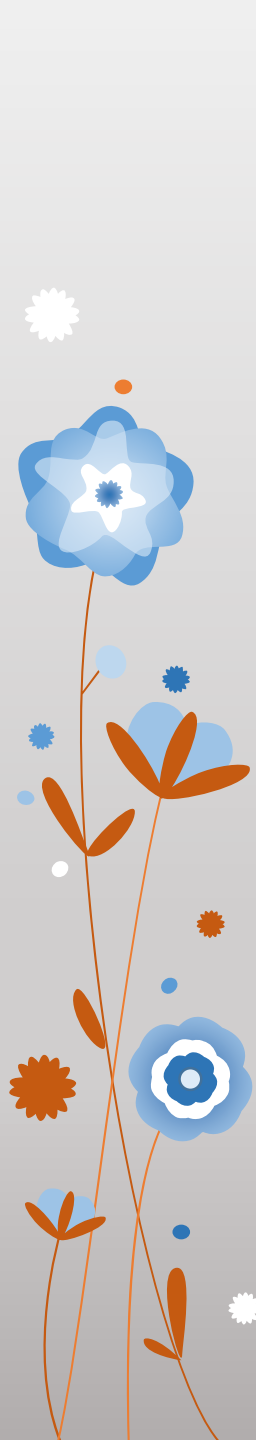
0. Back to Main Menu

Example

Register employee:

➢ Enter First Name: JoJo

➢ Enter the last name: Barte

➢ Enter birthday: 730123

➢ Enter salary: 23444

➢ Enter department (1 = DBAdmin, 2 = Developer, 3 = Technician, 4 = Marketing, 5 = Secretary, 6 = Web Designer, 7 = Chief:) : 4

>>> Employee added

```java
ArrayList<Integer> list = new ArrayList<Integer>();
list.add(8);
list.add(-3);
list.add(16);
list.add(11);

int min = list.get(0);
int max = list.get(0);

for(Integer i: list) {
    if(i < min) min = i;
    if(i > max) max = i;
}

System.out.println("min = " + min);
System.out.println("max = " + max);
```

if you want to work with a simple for loop :

```java
for(int i = 0; i < list.size(); i++) {
    int number = list.get(i);
    if(number < min) min = number;
    if(number > max) max = number;
}
```