

## Practical session 9

This work should be completed before the next lecture.

### Task 1: Sports Day collections

Copy your NetBeans project from Task 1 for Week 8.

Modify the program so that it uses Java streams to collect the participants of each race into `Lists`. Print the contents of each list.

#### Portfolio requirements:

- The NetBeans project for this completed task

### Task 2: Average salary

Copy your NetBeans project from Task 3 for Week 8.

Modify the program so that it uses a stream reduction to calculate the average salary of all employees. Print the average salary after printing the list of employees in ascending order of name within descending order of salary.

#### Portfolio requirements:

- The NetBeans project for this completed task

### Task 3: Employee collection

Copy (again) your NetBeans project from Task 3 for Week 8.

Modify the program so that all employees in a department are printed. The user inputs the name of the department. Use a collector for the printing, as shown in the lecture demonstration.

#### Portfolio requirements:

- The NetBeans project for this completed task

### Task 4: Factorial with streams

Use streams to calculate and print the factorial of a positive integer input by the user.

#### Portfolio requirements:

- The NetBeans project for this completed task

## Task 5: Explore Collectors

In your independent study time, explore the `Collectors` class to become familiar with its other various methods.

Try writing some code that uses these other methods.

### Portfolio requirements:

- The Java code you write for this task