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## Lab Session 3: Input/Output in Java

**Exercise 1:** Write a Java program to find min and max of an array of doubles:

- Size of the array is entered from the keyboard
- · Values of elements of array are entered from the keyboard
- Print out min and max to the screen
- Use Scanner wrapper and nextDouble() method to get data from keyboard

**Exercise 2:** Write a Java program to find the middle element (median) of an array of integers:

- · Size of array is entered randomly from the keyboard
  - o If the size is an odd number, then median is the middle element
  - If the size is an even number, then median is the mean of the two middle element
- · Values of elements of array are entered from the keyboard
- Print out the middle element (median) to the screen
- Use Scanner wrapper and nextDouble() method to get data from keyboard

**Exercise 3:** Write a Java program to manage the employees of a company as follows:

- Number of employees (n) is entered from keyboard
- Information of each employee is entered from keyboard, including:
  - o ID
  - Full name
  - Date of birth
  - Department

1



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- Working position
- Start working date
- Seniority coefficient
- Monthly performance evaluation coefficient
- Information of n employees are saved in a text file named: employees.txt
- Read information of employees from saved employees.txt file and print out to the screen the information of n employees as follows:
  - (a) Two consecutive employees are separated by the following block:

	=
Order: 1	
Employee ID: 34586	
	=

- (b) For each block, the following information of the employee is displayed:
- o Employee full name
- o Employee date of birth
- Employee department
- o Employee working position
- o Number of months of working
- Basic salary = seniority\_coefficient \* minimum\_salary
- Extra salary = monthly\_performance\_evaluation\_coefficient \*
  basic\_salary
- Salary = basic\_salary + extra\_salary

Note: minimum\_salary is entered from keyboard