

LAB211 Assignment

Type:
Code:
LOC:
Slot(s):

Short Assignment
J1.S.P0063
25
1

Title

Input and display Person Info.

Background

N/A

Program Specifications

Write a program allow user to input and sort person information (name, address, salary)

- Validate salary is a number or not
- Sort Person list ascending
- Show 3 person information by ascending of salary

Function details:

Function 1: Display Gui And Input Data.

- Users run the program. The program prompts users input Data.
- Auto next **Function 2**.

Function 2: Perform function

- Program display input information
- Sort person list by salary ascending and exit program

Expectation of User interface:

```
=====Management Person programer=====
Input Information of Person
Please input name:NghiaNV
Please input address:Ha Noi
Please input salary:abc
You must input digit.
Please input salary:-2000
Salary is greater than zero
Please input salary:2000
Input Information of Person
Please input name:LienVT
Please input address:Ha Noi
Please input salary:500
Input Information of Person
Please input name:TuanNT
Please input address:Ha Noi
Please input salary:1000
```

```
Information of Person you have entered:
Name:LienVT
Address:Ha Noi
Salary:500.0
```

```
Information of Person you have entered:
Name:TuanNT
Address:Ha Noi
Salary:1000.0
```

```
Information of Person you have entered:
Name:NghiaNV
Address:Ha Noi
Salary:2000.0
```

Guidelines

Student must implement methods

- inputPersonInfo

- displayPersonInfo
- sortBySalary

in startup code.

Example:

Create a class named Person with properties:

private String name;

private String address;

private double salary;

+ Create constructors: name, address, salary

+ Create get/set functions for Person properties

+ Create function Person inputPersonInfo (String name, String address, String sSalary):

- Validate salary is a number or not.
- If salary is not a number, prompt use to re-input and show error message that salary must be a number.
- If salary is a negative number prompt use to re-input and show error message that salary must be a positive number.

+ Create a function displayPersonInfo(Person person)

- Display person properties

+ Create Person[] sortBySalary(Person[] person):

Sort person by BubbleSort algorithm

+ Create an array of 3 person.

Function 1: Input Person information

- Program prompt user to input name, address, salary of Person
- Create a function: Person inputPersonInfo (String name,String address, String sSalary) throws Exception
 - Input:
 - name: name of Person
 - address: address of Person
 - salary: salary of Person
 - Return value:
 - Person object.
 - Exception("Salary is greater than zero"); if input invalid
 - Exception("You must input Salary."); if input invalid
 - Exception("You must input digit."); if input invalid

Function 2: Display Person information.

- Program show all Person properties just input
- Create a function: void displayPersonInfo(Person person)

- Input:
 - person: Person object

Function 3: Sort Person array by salary ascending.

- Program display all Person properties sort by Person's salary
- Create function: `Person[] sortBySalary(Person[] person)` throws Exception
 - Input:
 - person: Person array need to be sorted.
 - Return value:
 - Person array sorted by salary.
 - `Exception("Can't Sort Person");` If there a errors