

PRO192 LAB3

Code: SUM2022
Class:
Slot(s): 1
Time:

Exercise 1 (9)

Title

Create a Java console program to manage employee in the hospital.

Program Specifications

All employees have common attributes: id, name, phone, email and employee type.

There are two values of employee's type:

- 1: for Doctor
- 2: for Nurse

However, **each kind of employee** has addition different attributes:

- Doctor: coefficient(float)
- Nurse: department, allowance (float)

Main Screen as below:

WELCOME TO EMPLOYEE MANAGEMENT

- 1. Create Doctor**
- 2. Create Nurse**
- 3. View all employee's information**

=====Doctor=====

L1 | John Smith | 0912345678 | johnsmith@gmail.com | 3.33

=====Nurse=====

O1 | Richard | 0987654345 | richard@gmail.com | IT | 400000

Write a function to user **create employee and store in ArrayList**: User creates employee by inputting information from keyboard. Enter an employee at once.

Exercise 2 (1)

Title

Handling fractions program.

Program Specifications

Design a program that allows users to input the number of list fractions. Generate random integer in number range input. Display sorted fractions list.

Fraction class contains numerator, denominator attributes, constructor, getter/setter methods for each attribute.

All fractions are stored in a Array list.

Function details:

1. Display a screen to prompt users to input a positive integer number.
 - Users run the program, display a screen to ask users to enter a positive integer number.
 - Users input a positive integer number. Then, perform **Function 2**.
2. Display:
 - Generate list random fractions (with number of element that user just inputted).
 - Sort array fraction list ascending and display.

Expectation of user interface:

```
Enter the number of list:
5
Sorted fraction list:
[10/6, 10/5, 8/2, 4/1, 8/1]
```