**Computer Language 2023**

**Relay Assignment #2 (Due: 23/May 23:59:59)**

**ITM Engineering Co., Ltd. – Part II**

* ITM Engineering Co., Ltd. intends to develop a system for managing employee information. The employees can be categorized into 1) Full-time and 2) Part-time. Define the classes for this category.
* Implement the first prototype to meet the following requirements:
  + **Use the source code provided.**
  + Your program must be able to register fulltime and parttime employees
  + Testing code is included in main() method of EmployeeTest class
* Refer to the execution result screen at the bottom.
* Information on the employee category
  + Fullt-ime

1. id (int) // employee id
2. name (string) // employee name
3. department (refer to DepartmentEnum) // employee department
4. position (define PositionEnum)
5. grade (int) // salary-level
   * Part-time
6. id (int) // employee id
7. name (string) // employee name
8. department (refer to DepartmentEnum) // employee department
9. hours (int) // working hours

* Requirements
  + Define a class for each category (i.e., FullTimeEmp and PartTimeEmp)
    - Do not use inheritance
    - Class must include all the information provided above
    - All the fields must be declared private
  + EmployeeSet class manages all employees (both fulltime and parttime) using arrays (refer to EmployeeSet class)
  + Define PositionEnum (employee package):

Director (1)

General Manager (2)

Manager (3)

Assistant Manager (4)

Staff (5)

* + Implement methods to register an employee in Utils class

**Expected output from testing code)**

텍스트, 실내, 스크린샷이(가) 표시된 사진

자동 생성된 설명

텍스트이(가) 표시된 사진

자동 생성된 설명

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자동 생성된 설명

**Submission)**

**\* You don’t need to submit any files regarding part II.**

**\* The above expected output is just for your own internal testing.**

**\* All source codes for the Part II MUST be merged into the source code for the Part III.**

**\* And then submit the project files for the Part III only.**

**ITM Engineering Co., Ltd. – Part III**

* ITM Engineering Co., Ltd. intends to develop a system for managing employee information. The employees can be categorized into 1) Full-time and 2) Part-time. Write a complete system to meet the following requirements:
  + Combine the result of the Part I and the Part II   
    (Actually, no additional implementation required!).
  + Write a short description (0.5~1 page) of your analysis on how your program works  
    (e.g., program’s flow, class relationship, usage of enums and utility class).
  + Refer to the execution result screen at the bottom.
* Menu (Refer to MainMenuEnum enum)

1. Register → Register a new employee (RegisterMenuEnum enum)

11. Registration of full-time employees

12. Registration of part-time employees

19. Back

2. Search → Search for employees (SearchMenuEnum enumeration)

21. Full search

29. Back

9. Exit → End Program (until user types 9, the program continues)

* Information on the employee category
  + Fullt-ime

1. id (int) // employee id
2. name (string) // employee name
3. department (refer to DepartmentEnum) // employee department
4. position (define PositionEnum)
5. grade (int) // salary-level
   * Part-time
6. id (int) // employee id
7. name (string) // employee name
8. department (refer to DepartmentEnum) // employee department
9. hours (int) // working hours

* Requirements
  + Define a class for each category (i.e., fulltime and parttime)
    - Do not use inheritance
    - Class must include all the information provided above
    - All the fields must be declared private
  + EmployeeSet class manages all employees (both fulltime and parttime) using arrays (refer to EmployeeSet class)
  + Implement methods to register an employee in Utils class
* Expected output)

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* Submission

**\* Zip your project and word document into a single file.**

**\* Your project MUST include all the result from the part II and part III.**

**\* Make sure your zip file include all \*.java files for your project.**

**\* Submit your zipped file on time.**