NAME : DANISH YOUSUF

ROLL NO : 63

REGESTRATION NO : 2241025008

SECTION 2241037

**DISCRIPTION OF DSA MINOR PROJECT**

**The given code defines a class hierarchy for an employee management system. It includes three classes: address, date, and employee, along with a test class containing four static methods. The address class contains fields for the street, city, state, country, and pincode, along with methods to set and get the values of these fields. The date class is a subclass of address and contains fields for the day, month, and year of a date, along with methods to set and get the values of these fields. The employee class is a subclass of date and contains fields for the employee's name, contact number, job position, salary, and employee ID. It also contains a method to display the details of an employee. The test class contains four static methods: arrangeEmployeeBySalary(employee e[]): This method takes an array of employee objects as input and sorts them in descending order by salary using bubble sort. Then it prints the details of each employee in the sorted array. getEmployeesByJobPosition(employee e[],String jp): This method takes an array of employee objects and a string representing the job position as input. It prints the details of all employees whose job position matches the input string. getEmployeesByHireDate(employee e[], date d1, date d2): This method takes an array of employee objects and two date objects representing the start and end dates as input. It prints the details of all employees whose hire date falls between the two input dates. foreignEmployeeCount(employee e[]): This method takes an array of employee objects as input and counts the number of foreign employees. It does this by examining the country code of each employee's contact number. If the country code is not "+91" (India's country code), then the employee is counted as a foreign employee. The code also includes a constructor for the employee class, which takes the employee's name, ID, job position, contact number, and salary as input and initializes the corresponding fields. There are also methods to display the details of an employee (details()) and to set and get the address and hire date of an employee (setAddress(), getAddress(), setDate(), getDate()). Overall, this code implements a basic employee management system with functionality for sorting employees by salary, finding employees by job position and hire date, and counting foreign employees.**

**EXAMPLE**

//\*\*Enter your Details\*\*

//enter your employee id

//25008

//enter your name

//dannish

//enter your job position

//manager

//enter your contact number

//+9123432

//enter your salary

//222222.3

//

//\*\*Enter your complete Adress\*\*

//Enter your Country

//india

//Enter your State

//kashmir

//Enter your City

//srinager

//Enter your Street

//anantnag

//Enter your Pincode

//19222222

//

//\*\*Enter your Date of Joining\*\*

//enter day number

//22

//enter month number

//2

//enter year

//2023

//\*\*Details of Employee\*\*

//Name : dannish

//Employ id : 25008

//Job Position : manager

//Salary : 222222.3

//Contact Number : +9123432

//Date of Joining : 22-2-2023

//Adress : anantnag(19222222)srinager,kashmir,india

//

//\*\*The number of foreign employees : 0

//

//\*\*Details of employees who are manager by profession\*\*

//\*\*Details of Employee\*\*

//Name : dannish

//Employ id : 25008

//Job Position : manager

//Salary : 222222.3

//Contact Number : +9123432

//Date of Joining : 22-2-2023

//Adress : anantnag(19222222)srinager,kashmir,india

//

//\*\*Details of employees with salary in a range of 150000 INR to 300000 INR\*\*

//\*\*Details of Employee\*\*

//Name : dannish

//Employ id : 25008

//Job Position : manager

//Salary : 222222.3

//Contact Number : +9123432

//Date of Joining : 22-2-2023

//Adress : anantnag(19222222)srinager,kashmir,india

//

//\*\*Details of employees whose hireDate is between 01-04-2022 to 31-03-2023

//\*\*Details of Employee\*\*

//Name : dannish

//Employ id : 25008

//Job Position : manager

//Salary : 222222.3

//Contact Number : +9123432

//Date of Joining : 22-2-2023

//Adress : anantnag(19222222)srinager,kashmir,india