**SIKSHA ‘O’ ANUSANDHAN**

**DEEMED TO BE UNIVERSITY**

**Admission Batch:                                              Session:**

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**Description & Output**

**Data Structures & Algorithms**

**(CSE-2001)**

***Submitted by***

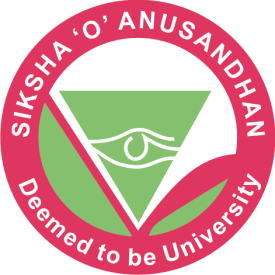
Name:  **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

Registration No.: **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

Branch: **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

Semester: **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

Section:  **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**



**Department of Computer Science & Engineering**

**Faculty of Engineering & Technology (ITER)**

**Jagamohan Nagar, Jagamara, Bhubaneswar, Odisha – 751030**

**Process:**

1. **Class Address:**

This class has private instance variables for storing **City, Country and Pincode**. The data is then stored in the instance variables using **constructor**.

1. **Class Date:**

This class has private instance variables for storing **Date, Day & Time**. The data is then stored in the instance variables using **constructor**.

1. **Class Employee:**

This class contains several instance variables: **(String name; int empId; double salary; Date hireDate; String jobPosition; String contactNumber; Address address).** These are then updated using **constructor.**

**display()** function is created such that it prints all the details of the required Employee.

1. **Class Test** (Main Class) **:**

The provided code is a Java class called "Test" that performs various operations on an array of Employee objects. And contains these methods:

1. **(arrangeEmployeeBySalary)** sorts the array of Employee objects based on their salary in decreasing order and prints them on the terminal.
2. **(getEmployeesByJobPosition)** takes an array of Employee objects and a job position as input. It displays the details of employees who have the specified job position.
3. **(getEmployeesByHireDate)** takes an array of Employee objects and two Date objects representing the start and end dates. It displays the details of employees who were hired between the specified dates.
4. **(foreignEmployeeCount)** takes an array of Employee objects and counts the number of employees whose contact number does not start with "+91", assuming that "+91" represents the country code of India.
5. **(getEmployeesBySalary)** takes an array of Employee objects and two salary values as input. It displays the details of employees whose salary falls within the specified range.
6. The **main method** of the class serves as the entry point of the program. Here an array of object Employee is created to store data of multiple employees. The rest of the methods are then called to get the desired outcomes.

**OUTPUT:**

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Insert Output Screenshots Here  
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