## Description.

The Project contain code for managing the Employee database . The Package PROJECT contain four java file (Address.java , Date.java , Employee.java , Test.java) . Here the only Test.java file contains the main function .

# Address.java file:

This java file contains the Address class with four instance variables i.e. street, city, state and pin code with the constructor for the initialize the instance variables. Setter Methods and Getter Methods for each of the instance variables. At last a addition getter method for getting the full address all together in String.

## Date.java file:

This java file contains the Date class with three instance variables i.e. day , month and year with the constructor for the initialize the instance variable . Setter Methods and Getter Methods for each of the instance variables . At last a addition getter method for getting the Date in String which include day , month and year (DD-MM-YYYY) .

### Employee.java file:

This java file contains the Employee class with seven instance variables i.e. name, empld, salary, hireDate, jobPositoin, contactNumber and address. The hireDate datatype is "Date" which refers to the Date class and address datatype is "Address" which refers to the Address class. Setter Methods and Getter Methods for each of the instance variables. An additional getter method which returns the Employee's all Detail in String datatype.

### Test.java file:

The following java file contains the main function . First the program asks the User to "Enter the Number of Employee : ", accordingly it creates the Employee database using the array employeedatabse[], in which a method is called "employeedatabse(n,sc) for input of required detail of the Employee . After the completion of the data entry of the Employee the interpreter return to main function .

# arrangeEmployeeBySalary(e);

This Method is called for sorting the Employee Database with respect to salary in decreasing order. After sorting it prints a message "Sorting is Done". The Method swaps the object in decreasing order according to the salary.

## getEmployeeByJobPosition(e , jp);

This Method display the Detail of the Employee of the given Job Position . The method compare the job position (jp) to the every Employee's job position with the help of string method .equal(jp) . if the job position is equal then it return the Employee Detail.

#### getEmployeeByHireDate(e ,Date1 ,Date2);

This Method for Displaying the Detail of the Employee between the input Date . The Date1 and Date2 are object . The method compares the Dates in between Date1 to Date2 and Displays the Employee Detail .

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foreignEmployeeCount(e);
           This Method counts the number of foreign Employee in Database . The method Checks
           the contact Number if it startswith "+91" and if it does not start, the variable c is
           incremented and returned.
           getEmployeeBySalary(e ,s1 ,s2);
           This Method is used to display the Employee detail between the input salary . s1 and s2
           is inputted by the user. The method checks salary in between s1 to s2 and displays the
           Employee Detail.
Output.
           Enter the Number of Employees: 10
           ----> Employee Database Creation Started :
           employeeDatebase[0] = new Employee("java user_1", 2001, 1000, new
           Date(10, 5, 2023), "manager", "+91123456", new Address("jagamara",
            "Bhubaneswar", "Odisha", 751089));
           employeeDatebase[1] = new Employee("java user 2", 2002, 2000, new
           Date(11, 5, 2023), "Software_Developer", "+91987456", new
           Address("jagamara", "Bhubaneswar", "Odisha", 751089));
           employeeDatebase[2] = new Employee("java user_3", 2003, 3000, new
           Date(13, 5, 2023), "Graphic Designer", "+85258963", new
           Address("jagamara", "Bhubaneswar", "Odisha", 751089));
           employeeDatebase[3] = new Employee("java user 4", 2004, 804000, new
           Date(14, 5, 2023), "manager", "+652789654", new Address("jagamara",
            "Bhubaneswar", "Odisha", 751089));
            employeeDatebase[4] = new Employee("java user 5", 2005, 5000, new
           Date(15, 5, 2023), "Software_Developer", "+91789654", new
           Address("jagamara", "Bhubaneswar", "Odisha", 751089));
           employeeDatebase[5] = new Employee("java user_6", 2006, 6000, new
           Date(16, 5, 2023), "manager", "+85941256", new Address("jagamara",
            "Bhubaneswar", "Odisha", 751089));
           employeeDatebase[6] = new Employee("java user_7", 2007, 7000, new
           Date(17, 5, 2023), "Data_Scientist", "+78951236", new
           Address("jagamara", "Bhubaneswar", "Odisha", 751089));
           employeeDatebase[7] = new Employee("java user 8", 2008, 8000, new
           Date(18, 5, 2023), "Software Developer", "+32456987", new
           Address("jagamara", "Bhubaneswar", "Odisha", 751089));
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employeeDatebase[8] = new Employee("java user_9", 2009, 9000, new
Date(19, 5, 2023), "manager", "+91852456", new Address("jagamara",
"Bhubaneswar", "Odisha", 751089));
employeeDatebase[9] = new Employee("java user_10", 2010, 10000, new
Date(20, 5, 2023), "Cyber_Security", "+91456852", new
Address("jagamara", "Bhubaneswar", "Odisha", 751089));
----> Sorting the Employee Database According to Salary in Decreasing Order:
----> Sorting is Done <----
----> For Displaying the Detail of Employee (of the Entered Job Position ) :
Enter Job Position: manager
-----> Employee Detail <----::
Name: java user_4
Employee Id: 2004
Salary: 804000.0
Hire Date: 14-5-2023
Job Position: manager
Contact Number: +652789654
Address: jagamara, Bhubaneswar, Odisha, 751089
-----> Employee Detail <-----:
Name: java user 9
Employee Id: 2009
Salary: 9000.0
Hire Date: 19-5-2023
Job Position: manager
Contact Number: +91852456
Address: jagamara, Bhubaneswar, Odisha, 751089
-----> Employee Detail <-----:
Name: java user 6
Employee Id: 2006
Salary: 6000.0
Hire Date: 16-5-2023
Job Position: manager
Contact Number: +85941256
Address: jagamara, Bhubaneswar, Odisha, 751089
----> Employee Detail <----::
Name: java user 1
Employee Id: 2001
Salary: 1000.0
Hire Date: 10-5-2023
Job Position: manager
```

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Contact Number: +91123456
Address: jagamara, Bhubaneswar, Odisha, 751089
----> For Displaying the Detail of the Employee Between the Following Dates :
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Enter starting Hire Date: 13 5 2023
Enter Ending Hire Date: 18 5 2023
-----> Employee Detail <----::
Name: java user_4
Employee Id: 2004
Salary: 804000.0
Hire Date: 14-5-2023
Job Position: manager
Contact Number: +652789654
Address: jagamara, Bhubaneswar, Odisha, 751089
-----> Employee Detail <-----:
Name: java user 8
Employee Id: 2008
Salary: 8000.0
Hire Date: 18-5-2023
Job Position: Software Developer
Contact Number: +32456987
Address: jagamara, Bhubaneswar, Odisha, 751089
-----> Employee Detail <-----:
Name: java user 7
Employee Id: 2007
Salary: 7000.0
Hire Date: 17-5-2023
Job Position : Data Scientist
Contact Number: +78951236
Address: jagamara, Bhubaneswar, Odisha, 751089
----> Employee Detail <----::
Name: java user 6
Employee Id: 2006
Salary: 6000.0
Hire Date: 16-5-2023
Job Position: manager
Contact Number: +85941256
Address: jagamara, Bhubaneswar, Odisha, 751089
-----> Employee Detail <-----:
Name: java user_5
Employee Id: 2005
Salary: 5000.0
Hire Date: 15-5-2023
```

```
Job Position : Software Developer
Contact Number: +91789654
Address: jagamara, Bhubaneswar, Odisha, 751089
-----> Employee Detail <-----:
Name: java user 3
Employee Id: 2003
Salary: 3000.0
Hire Date: 13-5-2023
Job Position: Graphic_Designer
Contact Number: +85258963
Address: jagamara, Bhubaneswar, Odisha, 751089
----> Display the Foreign Employees:
The Number of Foreign Employees are: 5
----> Displaying the Employee Detail between the range of the following Salary :
٧
Enter the salary value of S1: 3000
Enter the salary value of s2: 7000
-----> Employee Detail <-----:
Name: java user_7
Employee Id: 2007
Salary: 7000.0
Hire Date: 17-5-2023
Job Position : Data Scientist
Contact Number: +78951236
Address: jagamara, Bhubaneswar, Odisha, 751089
-----> Employee Detail <-----:
Name: java user 6
Employee Id: 2006
Salary: 6000.0
Hire Date: 16-5-2023
Job Position: manager
Contact Number: +85941256
Address: jagamara, Bhubaneswar, Odisha, 751089
-----> Employee Detail <-----:
Name: java user 5
Employee Id: 2005
Salary: 5000.0
Hire Date: 15-5-2023
Job Position : Software Developer
Contact Number: +91789654
Address: jagamara, Bhubaneswar, Odisha, 751089
----> Employee Detail <----::
Name: java user 3
Employee Id: 2003
Salary: 3000.0
```

Hire Date : 13-5-2023

Job Position : Graphic\_Designer Contact Number : +85258963

Address: jagamara, Bhubaneswar, Odisha, 751089