**PROBLEM BASED LEARNING IN JAVA LAB**

**20CSP-321**

**Submitted for the requirement of**

**Lab course**

BACHELOR OF ENGINEERING

**COMPUTER SCIENCE & ENGINEERING**

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**Submitted to: Submitted By:**

**Er. Nongmeikapam Thoiba Singh Yana Srivastava**

**20BCS2279**

**20BCSWM\_906B**

**LABINDEX**

NAME: YANA SRIVASTAVA

SUBJECT NAME: Problem Based Learning in Java Lab

UID: 20BCS2279

SUBJECT CODE:20 CSP-321

SECTION: 20BCSWM\_906 B

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| **Sr.No** | **Program** | **Date** | **Evaluation** | | | | **Sign** |
| **LW**  **(12)** | **VV**  **(8)** | **FW**  **(10)** | **Total**  **(30)** |
|  | Given the following table containing information about employees of an organization, develop a small java application, which accepts employee id from the command prompt and displays the following details as output. | 10.08.2022 |  |  |  |  |  |
|  | A Video Rental Inventory System. | 17.08.2022 |  |  |  |  |  |
| 3. | Interest Calculator. | 22.08.2022 |  |  |  |  |  |
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**Experiment 1**

**Student Name:** Yana Srivastava **UID:** 20BCS2279

**Branch:** BE CSE **Section/Group:** 20BCSWM\_906 B

**Semester:** 5th  **Date of Performance:** 10.08.2022

**Subject Name:** Problem Based Learning in Java Lab **Subject Code:** 20CSP\_321

1. **Aim/Overview of the practical:**

Given the following table containing information about employees of an organization, develop a small java application, which accepts employee id from the command prompt and displays the following details as output:

Emp No Emp Name Department Designation and Salary

Salary is calculated as Basic+HRA+DA-IT. (DA details are given in the Designation table)

1. **Task to be done/ Which logistics used:**

* Concepts of array will be used
* Concept of array mapping will be used to connect the elements of two tables and display the output.

1. **Algorithm / Flowchart:**
2. Insert the elements of table1 in the array as per the credentials and identify the datatype.
3. After that insert the designation and salary of another table.
4. Initialize the index with 0 and DA.
5. Map the designation code of both the tables to generate the index of the employee number.
6. Give designation code to the switch conditions with all the credentials to be displayed.
7. Then calculate the salary with the given formula (Basic+HRA+DA-IT).
8. **Steps for experiment/practical/Code:**

import java.util.\*;

public class exp1\_1

{

public static void main(String[] args)

{

String[] Ename = {"Ashish ","Sushma ","Rahul ","Chahat ","Ranjan ","Suman ","Tanmay

"},

Jdate =

{"01/04/200100009","23/08/2012","12/11/2018","29/0/2013","16/07/2005","1/1/2000","12/06/2006"},

Dept = {"R&D ","PM ","Acct ","Front Desk","Engg ","Manufacturing","PM "}, Designation = {" "," "," "," "," "};

char[] Code = {'e','c','k','r','m','e','c'};

int[] Basic = {20000,30000,10000,12000,50000,23000,29000}, HRA = {8000,12000,8000,6000,20000,9000,12000}, IT= {3000,9000,1000,2000,20000,4400,10000},

Eno = {1001,1002,1003,1004,1005,1006,1007}, DA = {1,2,3,4,5}; int N=0,t=-1,index=0;

Scanner sc = new Scanner(System.in);

System.out.println("Enter eno");

N = sc.nextInt();

for(int i=0;i<=6;i++){

if(N==Eno[i])

{

t=i%5;

index=i;

}

}

if(t==-1)

{

System.out.println("There is no employee with empid: "+N); System.exit(0);

}

switch (Code[t])

{

case 'e' :

{

Designation[0]="Engineer ";

DA[0] = 20000;

break;

}

case 'c' :

{

Designation[1]="Consultant ";

DA[1] = 32000;

break;

}

case 'k' :

{

Designation[2]="Clerk ";

DA[2] = 12000;

break;

}

case 'r':

{

Designation[3]="Receptionist";

DA[3] = 15000;

break;

}

case 'm':

{

Designation[4]="Manager ";

DA[4] = 40000;

break;

}

default : break;

}

System.out.print("EmpNo. Emp Name Department Designation Salary "); System.out.println();

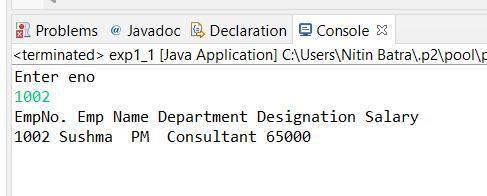
System.out.print(Eno[index]+" "+Ename[index]+" "+Dept[index]+"

"+Designation[t]+""+(Basic[index]+HRA[index]+DA[t]-IT[index]));

}

}

1. **Result/Output/Writing Summary:**



1. **Learning outcomes (What I have learnt):**
2. Learnt about arrays in Java.
3. Learnt about classes in Java.

**Evaluation Grid (To be created as per the SOP and Assessment guidelines by the faculty):**

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| --- | --- | --- | --- |
| Sr. No. | Parameters | Marks Obtained | Maximum Marks |
| 1. |  |  |  |
| 2. |  |  |  |
| 3. |  |  |  |
|  |  |  |  |