"Experiment 1.1"

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Branch: **CSE** Section/Group: **808-A**
Semester: **5** Date of Performance: **25-08-22**
Subject Name: **PBLJ Lab** Subject Code: **20CSP-321**

AIM:

Create an application to save the employee information using arrays.

Minimum Hardware Requirements:

- 2 GHz CPU or 1 virtual CPU in virtualized environments.
- 1 GB of RAM.
- 4 GB of storage.

Minimum Software Requirements:

Software	Version
• OS	• Mac OS 10.15, HP-UX 11i V3, AIX 7.2, Windows Server 2019, Windows 10, Solaris 11.3, Red Hat Enterprise Linux 8.1, Ubuntu Server 20.04
• JDK	• JDK 1.8.0, JDK 11, Ellipse IDE, Net, NetBeans 8.2, Notepad++

Source Code:

```java
// SUMIT KUMAR
// UID: 20BCS8226

// Save: Employee.java

package sumit;

import java.util.*;
public class Employee {

	public static void main(String[] args) {
		// TODO Auto-generated method stub

		int i,f=0,pos = -1,da=0,salary;
		char empDes;
		String em-
pid[]={"1001","1002","1003","1004","1005","1006","1007"};
		String depName[]={"R&D","PM","Acct","Front Desk","Engg","Manu-
facturing","PM"};
		String empName[]={"Raaj","Sushma","Rahul","Ravi","Ranjan","Su-
mit","Saurav"};
		String
dateJoin[]={"1/04/2009","23/08/2012","12/11/2008","29/01/2013","16/07/2005
","1/01/2000","12//06/2006"};
		int basic[]={20000,30000,10000,12000,50000,23000,29000};
		int hra[]={8000,12000,8000,6000,20000,9000,12000};
		int it[]={3000,9000,1000,2000,20000,4400,10000};
		String desg = null;
		char DesCodes[]={'e','c','k','r','m','e','c'};
		Scanner in = new Scanner(System.in);
		System.out.println("Enter empid: ");
		String s = in.next();
		for(i=0;i<(empid.length);i++)
		{
			if(args[0].equals(empid[i]))
			{
				pos=i;
				//f=1;
			}

		}
		if(pos==-1)
		{
			System.out.println("Emp id does not exist");
			return;
		}

		//System.out.println("Hello");
		empDes=DesCodes[pos];
		switch(empDes)
		{
		case 'e':
			desg="Engineer";
			da=20000;
```

```
                break;
            case 'c':
                desg="Consultants";
                da=32000;
                break;
            case 'k':
                desg="Clerk";
                da=12000;
                break;
            case 'r':
                desg="Receptionist";
                da=15000;
                break;
            case 'm':
                desg="Manager";
                da=40000;
                break;
            }
            salary=basic[pos]+hra[pos]+it[pos]+da;
            //System.out.println(salary);
            System.out.println("Emp no\t\tEmployee Name\t\tDeaprt-
ment\t\tDesignation\t\tSalary");
            System.out.println(empid[pos]+"\t\t\t"+emp-
Name[pos]+"\t\t\t"+depName[pos]+"\t\t\t"+desg+"\t\t"+salary);
        }
}
```

Output:

```
PROBLEMS 6   OUTPUT   DEBUG CONSOLE   TERMINAL

PS E:\work\java> cd "e:\work\java\" ; if ($?) { javac Employee.java } ; if ($?) { java Employee }
Enter empid:
69
Emp id does not exist
PS E:\work\java> cd "e:\work\java\" ; if ($?) { javac Employee.java } ; if ($?) { java Employee }
Enter empid:
1004
Emp no          Employee Name           Deaprtment              Designation             Salary
1004                    Ravi?,?Ranjan                   Front Desk                      Receptionist            35000
PS E:\work\java>
```

Learning outcomes:

- Learnt about getter and setter method.
- Learnt about factory method.
- Learnt to make code more efficient and maintainable by using Code refactoring.
- Learnt how to implement object-oriented designs with Java.
- Learnt how to use exception handling in Java applications.