Experiment - 1

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Subject Name: Project Based Learning in Java Lab **Subject Code: 20CSP-321**

1. Aim/Overview of the practical:
Create an application to save the employee information using arrays.

2. Task to be done/ Which logistics used:
Write the program to create an application to save the employee information using arrays.

3. Software Requirements (For programming-based labs):
- JDK-8 or any
- Eclipse-IDE for Java

4. Steps for experiment/practical/Code:

```
import java.io.BufferedReader;
import java.io.IOException;
import java.io.InputStreamReader;


public class Employee {
  String empId;
  String depName;
  String empDesignation;
  String empName;
  String dateJoin;
  int basic;
  int hra;
  int it;
  char designationCode;
  public static int da;

  public Employee(
    String empId,
    String depName,
    String empDesignation,
    String empName,
    String dateJoin,
    int basic,
    int hra,
```

```
  int it,
  char designationCode
) {
  this.empId = empId;
  this.depName = depName;
  this.empDesignation = empDesignation;
  this.empName = empName;
  this.dateJoin = dateJoin;
  this.basic = basic;
  this.hra = hra;
  this.it = it;
  this.designationCode = designationCode;
}

public static int da(char designationCode) {
  switch (designationCode) {
    case 'e':
      {
        da = 20000;
        break;
      }
    case 'c':
      {
        da = 32000;
        break;
      }
    case 'k':
      {
        da = 12000;
        break;
      }
    case 'r':
      {
        da = 15000;
        break;
      }
    case 'm':
      {
        da = 40000;
        break;
```

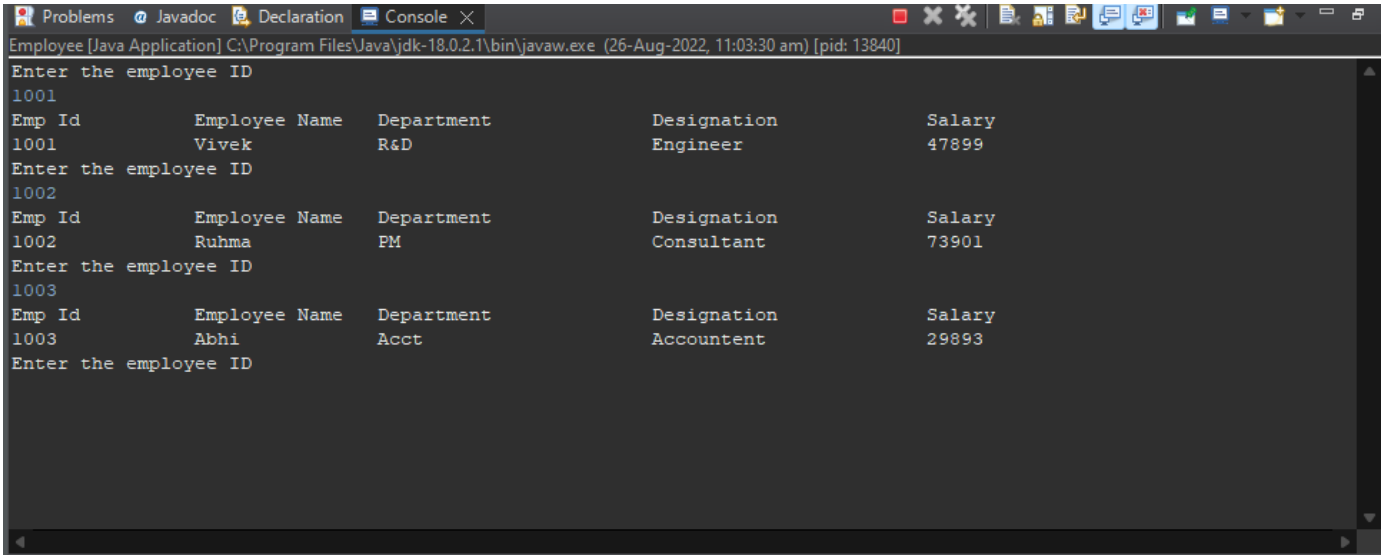
```
      }
    default:
      throw new IllegalStateException("Unexpected value: " + designationCode);
  }
  return da;
}

public static int salary(int basic, int hra, int da, int it) {
  int salary = basic + hra + da - it;
  return salary;
}

public static void details(
  String empId,
  String empName,
  String depName,
  String empDesignation,
  int salary
) {
  System.out.println(
    "Emp Id\t\tEmployee Name\tDepartment\t\tDesignation\t\tSalary"
  );
  System.out.println(
    empId+"\t\t"+empName+"\t\t"+depName+"\t\t\t"+empDesignation+"\t\t"+salary );
}

public static void main(String[] args) throws IOException {
  BufferedReader bufferedReader = new BufferedReader(
    new InputStreamReader(System.in)
  );
  String empId;
  int c = 0;
  Employee[] employees = new Employee[3];
  employees[0] =
    new Employee("1001","R&D","Engineer","Ash","1/04/2009",20000,8000,3000,'e');
  employees[1] =
    new Employee("1002","PM","Consultant","Anjali","23/08/2012",30000, 12000, 9000,'c');
  employees[2] =
    new Employee("1003","Acct","Clerk","Raju","12/11/2008",10000,8000,1000,'k');
  System.out.println("Enter the employee ID ");
  empId = bufferedReader.readLine();
```

```
  for (int i = 0; i < 3; i++) {
    if (employees[i].empId.equals(empId)) {
      c = 1;
      int salary = salary(
        employees[i].basic,
        employees[i].hra,
        da(employees[i].designationCode),
        employees[i].designationCode
      );
      details(
        employees[i].empId,
        employees[i].empName,
        employees[i].depName,
        employees[i].empDesignation,
        salary
      );
      break;
    }
  }
  if (c != 1) System.out.println("Entered employee ID not found");
 }
}
```

5. Observations/Discussions/ Complexity Analysis:

Here we have created the Array with the size of 3 and Data inserted, calculated the DA and Actual salary. Moreover, I've given the Search method with EmpId.

6. Result/Output/Writing Summary:



Learning outcomes (What I have learnt):

1. Learn How to create the array.

2. Array manipulation in java.

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

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