Experiment 1

Student Name: Sukhleen Kaur UID: 22BCS14011

Branch: CSE Section: 22BCS_KRG_IOT_3B

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Subject: Java Subject Code:22CSH-359

1. Aim: Create an application to save employee information using arrays.

2. Objective: To develop a functional application that effectively utilizes arrays to store, manage, and retrieve employee information, enabling efficient data organization and manipulation within the application.

3. Code:

```
import java.util.*;
class Employee {
String name;
int id;
String department;
int salary;
public Employee(String n, int i, String d, int s) {
this.name = n;
this.id = i;
this.department = d;
this.salary = s;
}}
public class EmployeeProject {
public static void main(String[] args) {
Scanner sc = new Scanner(System.in);
System.out.println("Enter the number of employees:");
int n = sc.nextInt();
Employee[] employees = new Employee[n];
for (int i = 0; i < n; i++) {
System.out.println("Enter details for employee" + (i + 1) +"-");
System.out.print("Name: ");
String name = sc.next();
System.out.print("ID: ");
int id = sc.nextInt();
System.out.print("Department: ");
```

```
String department = sc.next();
System.out.print("Salary: ");
int salary = sc.nextInt();
sc.nextLine();
employees[i] = new Employee(name, id, department, salary);
System.out.println("Enter the employee ID you want to check information
int checkId = sc.nextInt();
boolean found = false;
for (Employee emp : employees) {
if (emp.id == checkId) {
System.out.println("Employee Details:");
System.out.println("Name: " + emp.name);
System.out.println("Department: " + emp.department);
System.out.println("Salary: " + emp.salary);
found = true;
break; } }
if (!found) {
System.out.println("No employee found with ID: " + checkId);
```

4. Output:

```
PS C:\Users\22BCS\Downloads\PBLJ\com.student1> & 'C:\Program Files\Java\jdk-22\bin\java.exe' '-XX:+ShowCodeDetailsInExceptionM.
Enter the number of employees:
Enter details for employee 1-
Name: Sukhleen
ID: 1102
Department: CSE
Salary: 100000
Enter details for employee 2-
Name: Priya
Department: ECE
Salary: 90000
Enter details for employee 3-
Name: Rahul
ID: 1134
Department: Arts
Salary: 70000
Enter the employee ID you want to check information of:
Employee Details:
Name: Sukhleen
Department: CSE
Salary: 100000
PS C:\Users\22BCS\Downloads\PBLJ\com.student1>
```



5. Learning Outcomes:

- Learn how to define and use classes and objects, such as the Employee class for organizing and encapsulating employee details
- Gain insight into using arrays to store multiple objects and efficiently retrieve specific data using loops.
- Understand how to handle cases where user input does not match expected data, ensuring a robust program.
- Learn how to traverse data structures (e.g., arrays) to implement search functionality.
- Develop skills to create user-interactive applications that handle input and display information dynamically