

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

Discover. Learn. Empower.

Experiment 1

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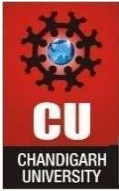
Subject: Project Based Learning in Java Subject Code: 22CSP-359

1. **Aim:** Create an application to save the employee information using arrays.
2. **Objective:** Take user input for Employee details and find the employee details using empID for a particular employee.

3. Implementation/Code:

```
import java.util.*;

class Employee {
    private int empID;
    private String name;
    private String dept;
    private double salary;
    Employee(int id, String n, String d, double s) {
        empID = id;
        name = n;
        dept = d;
        salary = s;
    }
    void display() {
        System.out.println("Name: " + name);
        System.out.println("ID: " + empID);
    }
}
```



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```
        System.out.println("Dept: " + dept);
        System.out.println("Salary: " + salary);
    }
    int getEmpID() {
        return empID;
    }
}

public class Project {
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);
        System.out.print("Enter number of employees: ");
        int n = sc.nextInt();
        List<Employee> employees = new ArrayList<>();
        for (int i = 0; i < n; i++) {
            System.out.println("Enter details for employee " + (i + 1) + ":");
            System.out.print("ID: ");
            int id = sc.nextInt();
            System.out.print("Name: ");
            String name = sc.next();
            System.out.print("Department: ");
            String dept = sc.next();
            System.out.print("Salary: ");
            double salary = sc.nextDouble();
            employees.add(new Employee(id, name, dept, salary));
        }
        System.out.print("Enter the ID of the employee to search: ");
        int target = sc.nextInt();
```



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```
        for (Employee e : employees) {  
            if (e.getEmpID() == target) {  
                e.display();  
            }  
        }  
    }  
}
```

4. Output:

```
Enter number of employees: 3  
Enter details for employee 1:  
ID: 1  
Name: anu  
Department: cse  
Salary: 1500000  
Enter details for employee 2:  
ID: 2  
Name: asthu  
Department: it  
Salary: 2000000  
Enter details for employee 3:  
ID: 3  
Name: niki  
Department: ece  
Salary: 1500000  
Enter the ID of the employee to search: 2  
Name: asthu  
ID: 2  
Dept: it  
Salary: 2000000.0  
PS C:\Users\hp.pc\Desktop\programming languages\java\javaClass>
```



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5. Learning Outcomes

- a) Understand how to map employee details (like designation codes to roles) using efficient logic and structures.
- b) Learn to identify and address input mismatches or invalid entries through proper validation and error messages.
- c) Gain skills in presenting data in a well-structured and readable format for better user understanding.