

①

Write a Java program to demonstrate encapsulation & inheritance for various level of management in a company

```
class Employee {
```

```
    private String name;
```

```
    private String id;
```

```
    public Employee (String name, String id) {
```

```
        this.name = name;
```

```
        this.id = id;
```

```
    }
```

```
    public String getName() {
```

```
        return name;
```

```
    }
```

```
    public String getId() {
```

```
        return id;
```

```
    }
```

```
    public void displayInfo() {
```

```
        System.out.println("ID: " + id);
```

```
    }
```

```
}
```

```
class Manager extends Employee {
```

```
    private String department;
```

```
    public Manager (String name, String id, String department) {
```

```
        super(name, id);
```

```
        this.department = department;
```

```
this department = department; }
```

```
public String getDepartment() {
```

```
    return department;
```

```
}
```

```
public void displayInfo() {
```

```
    super.displayInfo();
```

```
    System.out.println("Department: " + department);
```

```
}
```

```
class Director extends Manager {
```

```
    private String role;
```

```
    public Director (String name, String id, String department, String role) {
```

```
        super (name, id, department);
```

```
        this.role = role;
```

```
}
```

```
    public String getRole() {
```

```
        return role;
```

```
}
```

```
    public void displayInfo() {
```

```
        super.displayInfo();
```

```
        System.out.println("Role: " + role);
```

```
}
```

public class CompanyManager {

public static void main (String[] args) {

Employee employee = new Employee("Johnson", "123");

Manager manager = new

manager("Jane Smith", "456", "Salary");

Director director = new

Director("Alice Johnson", "789", "Finance", "Finance Director");

Employee empManager = manager;

Employee empDirector = director;

employee.displayInfo();

System.out.println("");

empManager.displayInfo();

System.out.println("");

empDirector.displayInfo();