1. Write a java program to demonstrate Encapsulation and inheritance for various levels of management in a company.

```java
Class Employee {
Private string name;
Private string id;
Public Employee (string name, string id) {
    this.name = name;
    this.id = id;
    }
Public string get Name() {
    return name;
    }
Public string get id() {
    return id;
    }
Public void display info() {
    System.out.println ("ID: "+id);
    }
}

class manager extends Employee {
        Private string department;
Public manager (string name, string id, string department);
Public manager (string name, string id, string department) {
        Super (name, id);
        this.department = department;
        Public string get opartment() {
        return department;
        }
```

```java
Public void display Into (){
    super.display into ();
System.out.println ("Department: "+ department);
    }
}
Public class Director extends manager{
    Private string role;
    Public Director (string name, String id, String Department, String role){
    super (name, id, department);
        this.role = role;
        }

    Pubic string get Role (){
        return role;
        }
    Public void display into (){
        super.display Into ();
        System.out.println ("Role: "+ role);
        }
    }
    Public class company management{
    public static void main (string [] args) {
    Employee employee = new Employee ("John Doe", "123");
        manager manager = new
    manager ("Jane smith", "456", Salo");
        Director director = new
    Director ("Alice Johnson", "789", finance" " finance Director).
        Employee Emp manager = manager;
        Employee Emp Director = director;
```

```
employee.displayInfo();
System.out.println(".");
emp.manager.displayInfo();
System.out.println("____.")
EmpDirector.displayInfo();
```