1. Write a program to create a two packages employeepackage and departmentpackage and under employeepackage create classes like Employee, Manager, Admin Under departmentpackage create class by name Department and Project.

EMPLOYEE CLASS:

```
package employeepackage;
public class Employee {
public int empid;
private String empname;
public int empage;
Employee(int empid, String empname, int empage)
{
this.empid=empid;
this.empname=empname;
this.empage=empage;
}
void display()
{
System.out.println("employee id: "+empid);
System.out.println("employee name: "+empname);
System.out.println("employee age: "+empage);
}
}
```

MANAGER CLASS:

```
package employeepackage; public
class Manager { public int
managerid; private String
managername; public int
managerage; public float
managersalary;
Manager (int managerid, String managername, int
managerage,float managersalary)
{
this.managerid=managerid;
this.managername=managername;
this.managerage=managerage;
this.managersalary=managersalary;
}
void displayManager()
{
System.out.println("manager id: "+managerid);
System.out.println("manager name: "+managername);
System.out.println("manager age: "+managerage);
System.out.println("manager salary: "+managersalary);
```

DEPARTMENT CLASS:

```
package departmentpackage;
public class Department {
public int deptid;
private String deptname;
public int deptcount;
Department(int deptid, String deptname, int deptcount)
{
this.deptid=deptid;
this.deptname=deptname;
this.deptcount=deptcount;
}
void displayDepartment()
{
System.out.println("department id: "+deptid);
System.out.println("department name: "+deptname);
System.out.println("department count: "+deptcount);
}
}
```

2. Create a Main class to test the above classes.

ADMIN CLASS:

```
package employeepackage;
public class Admin {
  public static void main(String[] args) {
    System.out.println("Displaying employee details");
    Employee employeedetails=new
    Employee(2345,"keerthana",22);
    employeedetails.display();
    System.out.println("Displaying manager details");
    Manager managerdetails=new
    Manager(7777,"pavithra",34,20000f);
    managerdetails.displayManager();
}
```

PROJECT CLASS:

```
package departmentpackage;
public class Project {
private String projecttype;
public int projectcount;
Project(String projecttype,int projectcount)
this.projecttype=projecttype;
this.projectcount=projectcount;
void displayProject()
{
System.out.println("project type: "+projecttype);
System.out.println("project count: "+projectcount);
public static void main(String[] args) {
System.out.println("displaying department details");
Department department=new Department(984, "IT", 300);
department.displayDepartment();
System.out.println("displaying project details");
Project project=new Project("application",2);
project.displayProject();
}
}
```

3. Write a program to check how many Shape objects created.

```
public class ShapeObject {
private static int count;
//constructor of the class
public ShapeObject()
// increase the count variable by 1
count++;
}
public static void main(String[] args) {
ShapeObject square = new ShapeObject();
ShapeObject rectangle = new ShapeObject();
 ShapeObject triangle = new
ShapeObject();ShapeObject circle = new
ShapeObject();
System.out.print("Number of Objects created: "
+ShapeObject.count);
}
}
```