

```

1 You are given a list of Students as StudentList,
2 Your task is to find out the number of students in each department
3
4 Sample Output:
5 -----
6 Cyber Security : 2
7 Artificial Intelligence : 5
8 Computer Science : 3
9 Machine Learning : 2
10 Information Technology : 3
11 Humanities and Sciences : 2
12
13
14 The Student class looks like this:
15 -----
16
17 class Student
18 {
19     int id;
20     String name;
21     int age;
22     String gender;
23     String department;
24     int yearOfJoining;
25
26     public Student(int id, String name, int age, String gender, String department, int yearOfJoining )
27     {
28         this.id = id;
29         this.name = name;
30         this.age = age;
31         this.gender = gender;
32         this.department = department;
33         this.yearOfJoining = yearOfJoining;
34     }
35
36     public int getId()
37     {
38         return id;
39     }
40
41     public String getName()
42     {
43         return name;
44     }
45
46     public int getAge()
47     {
48         return age;
49     }
50
51     public String getGender()
52     {
53         return gender;
54     }
55
56     public String getDepartment()
57     {
58         return department;
59     }
60
61     public int getYearOfJoining()
62     {
63         return yearOfJoining;
64     }
65
66     @Override
67     public String toString()
68     {
69         return "Id : "+id
70             +", Name : "+name
71             +", Age : "+age
72             +", Gender : "+gender
73             +", Department : "+department
74             +", Year Of Joining : "+yearOfJoining;
75     }
76 }
```

Solution.java

```

1 class Solution{
2     public void countOfStudentsInDepartments(List<Student> StudentList){
3         //Implement your code here
4     }
5 }
```

Execution files

vpl_evaluate.cases

```

1 case =1
2 output =Cyber Security : 2
3 Artificial Intelligence : 5
4 Computer Science : 3
5 Machine Learning : 2
6 Information Technology : 3
7 Humanities and Sciences : 2
8
```

Main.java

```

1 import java.util.*;
2 import java.util.stream.Collectors;
3 class Main{
4     public static void main(String args[]){
5         List<Student> StudentList = new ArrayList<Student>();
6         StudentList.add(new Student(111, "Jiya Brein", 32, "Female", "Humanities and Sciences", 2011));
7         StudentList.add(new Student(122, "Paul Niksui", 25, "Male", "Computer Science", 2015));
8         StudentList.add(new Student(133, "Martin Theron", 29, "Male", "Information Technology", 2012));
9         StudentList.add(new Student(144, "Murali Gowda", 28, "Male", "Artificial Intelligence", 2014));
10        StudentList.add(new Student(155, "Nima Roy", 27, "Female", "Humanities and Sciences", 2013));
11        StudentList.add(new Student(166, "Iqbal Hussain", 43, "Male", "Cyber Security", 2016));
12        StudentList.add(new Student(177, "Manu Sharma", 35, "Male", "Machine Learning", 2010));
13        StudentList.add(new Student(188, "Wang Liu", 31, "Male", "Artificial Intelligence", 2015));
14        StudentList.add(new Student(199, "Amelia Zoe", 24, "Female", "Computer Science", 2016));
15        StudentList.add(new Student(200, "Jaden Dough", 38, "Male", "Cyber Security", 2015));
16        StudentList.add(new Student(211, "Jasna Kaur", 27, "Female", "Information Technology", 2014));
17        StudentList.add(new Student(222, "Nitin Joshi", 25, "Male", "Artificial Intelligence", 2016));
18        StudentList.add(new Student(233, "Jyothi Reddy", 27, "Female", "Machine Learning", 2013));
19        StudentList.add(new Student(244, "Nicolus Den", 24, "Male", "Computer Science", 2017));
20        StudentList.add(new Student(255, "Ali Baig", 23, "Male", "Information Technology", 2018));
21        StudentList.add(new Student(266, "Sanvi Pandey", 26, "Female", "Artificial Intelligence", 2015));
22        StudentList.add(new Student(277, "Anuj Chettiar", 31, "Male", "Artificial Intelligence", 2012));
23    }
24    new Solution().countOfStudentsInDepartments(StudentList);
25 }
26 }
```

Student.java

```

1 class Student
2 {
3     int id;
4     String name;
5     int age;
6     String gender;
7     String department;
8     int yearOfJoining;
9
10    public Student(int id, String name, int age, String gender, String department, int yearOfJoining )
11    {
12        this.id = id;
13        this.name = name;
14        this.age = age;
15        this.gender = gender;
16        this.department = department;
17        this.yearOfJoining = yearOfJoining;
18    }
19
20    public int getId()
21    {
22        return id;
23    }
24
25    public String getName()
26    {
27        return name;
28    }
29
30    public int getAge()
31    {
32        return age;
33    }
34
35    public String getGender()
36    {
37        return gender;
38    }
39
40    public String getDepartment()
41    {
42        return department;
43    }
44
45    public int getYearOfJoining()
46    {
47        return yearOfJoining;
48    }
49
50
51    @Override
52    public String toString()
53    {
54        return "Id : "+id
55                    +", Name : "+name
56                    +", Age : "+age
57                    +", Gender : "+gender
58                    +", Department : "+department
59                    +", Year Of Joining : "+yearOfJoining;
60    }
61 }
```