

Degree of Freedom

JAVA PROGRAM

You Observe 100 people to see who deposits garbage in the can who litters. You want to see if there is a difference based on gender.

A person can fall in one of four categories:

1. Male, do not deposits garbage
2. Male, do not litters
3. Female, do not deposits garbage
4. Female, do not litters

Following table give you the observations

	Deposit	Litters	
Females	18 15	7	25
Males	42	33	75
	60	40	100

Explanation: From above table 60 people deposit garbage and 40 litters.

To get percentage of Female who do not deposit we find by calculating (25% of 60) females to be value in the upper left cell.

Given this information is there any significant difference in littering behaviour between men and women?

Write a Java program to find num of male and female who do not deposit and litters. Pass the values from keyboard. Using object.

```
import java.util.*;

public class Assignment

{

    int num_deposited;
    int num_littered;
    int percentage_female;
    int percentage_male;

    public void deposit()
    {
        float deposited_female=(percentage_female*num_deposited)/100;
        float deposited_male=(percentage_male*num_deposited)/100;
        System.out.println("The number of female that deposited: " +
        deposited_female);
        System.out.println("The number of male that deposited: " +
        deposited_male);
    }

    public void littered()
    {
        float littered_female=(percentage_female*num_littered)/100;
        float littered_male=(percentage_male*num_littered)/100;
```

```
System.out.println("The number of female that littered: " +  
littered_female);
```

```
System.out.println("The number of male that littered: " +  
littered_male);
```

```
}
```

```
public static void main(String arg[])
```

```
{
```

```
Person myobj=new Person();
```

```
Scanner myscan=new Scanner(System.in);
```

```
System.out.println("Enter number of people that deposited garbage: ");
```

```
myobj.num_deposited=myscan.nextInt();
```

```
System.out.println("Enter number of people that littered: ");
```

```
myobj.num_littered=myscan.nextInt();
```

```
System.out.println("Enter percentage of female: ");
```

```
myobj.percentage_female=myscan.nextInt();
```

```
System.out.println("Enter percentage of male: ");
```

```
myobj.percentage_male=myscan.nextInt();
```

```
System.out.println("Analysis from the information:");
```

```
myobj.deposit();
```

```
myobj.littered();
```

```
System.out.println(".....Thank you!.....");
```

```
}
```

```
}
```

Raghu Bayya