

Sheth I.u.j. And sir m.v. college of arts science and commerce

Practical no. 5 mod2

Aim: .Performing independent two-sample t-tests using t.test() with grouping (R).

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RStudio
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1 data <- read.csv("employee_salary_dataset.csv")
2
10:21 (Top Level)

> data <- read.csv("employee_salary_dataset.csv")
> head(data, 10)
  EmployeeID Name Department Experience_Years Education_Level Age Gender City
1 Employee_1 Marketing 15 Master 53 Female Delhi
2 Employee_2 Operations 7 Bachelor 25 Female Bangalore
3 Employee_3 IT 12 High School 51 Female Hyderabad
4 Employee_4 Operations 8 PhD 44 Male Delhi
5 Employee_5 Operations 15 Master 36 Female Delhi
6 Employee_6 Finance 3 High School 50 Male Mumbai
7 Employee_7 IT 14 PhD 57 Male Mumbai
8 Employee_8 IT 17 PhD 34 Female Bangalore
9 Employee_9 IT 4 Bachelor 53 Male Hyderabad
10 Employee_10 Operations 18 High School 28 Male Mumbai

  Monthly_Salary
1 111416
2 95271
3 69064
4 95091
5 132450
6 65818
7 70525
8 44830
9 42429
10 31893

> # Perform independent two-sample t-test
> # Compare Monthly_Salary between Male and Female employees
> t_test_result <- t.test(Monthly_Salary ~ Gender, data = data)
> print(t_test_result)

Welch Two Sample t-test
```

```
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Welch Two Sample t-test

data: Monthly_Salary by Gender
t = 1.134, df = 43.095, p-value = 0.263
alternative hypothesis: true difference in means between group Female and group Male is not equal to 0
95 percent confidence interval:
 -8488.292 30303.010
sample estimates:
mean in group Female mean in group Male
      87306.19      76398.83

> print("simran s113")
[1] "simran s113"
> |
```

Name: Simran s113

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