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/Users/bps/PycharmProjects/hypothesis_tesing/venv/bin/python /Users/bps/PycharmProjects/hypothesis_tesing/main.py
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Welcome to the Hypothesis Testing calculator made by ALIAS GEORGE

Select the Calculator (type the no corresponding eg 1 for one mean Large sample)

1. One Mean Large sample
  2. One Mean Small sample
  3. Two Mean Large sample
  4. Two Mean Small sample with both normal and  $\sigma_1 = \sigma_1$
  5. Matched Pair t-Test
  6. One Variance Test
  7. Two Variance Test
  8. One Proportion Test
  9. Multi Proportion Test
  10. Two Proportion Difference Test
  11. R and C Analysis Test
  12. Goodness Fit Test
- 4

4. Two Mean Small sample with both normal and  $\sigma_1 = \sigma_1$

Level of significance: 0.05

Is the data given in raw format:

1. yes

2. no

1

Enter the Raw data of 1

707 632 604 652 669 674

No of Sample data 6

Mean of the sample data 656.3333333333334

Standard Deviation of the sample data 35.7472609673338

Enter the Raw data of 2

552 554 484 630 648 610

No of Sample data 6

Mean of the sample data 579.6666666666666

Standard Deviation of the sample data 61.15444927939967

$\mu_1 - \mu_2 : 0$

Select the alternative Hypothesis to test with null  $\mu_1 - \mu_2 = 0.0$

1.  $\mu_1 - \mu_2 < 0.0$

2.  $\mu_1 - \mu_2 > 0.0$

3.  $\mu_1 - \mu_2 \neq 0.0$

3

The null must be rejected if  $t < -2.2281$  or  $t > 2.2281$

Calculations

$t = 2.6511140904034836$

Decision

Null  $\mu_1 - \mu_2 = 0.0$  must be Rejected at level of significance 0.05 and Accept  $\mu_1 - \mu_2 \neq 0.0$

Process finished with exit code 0