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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 $\sigma_1 = \sigma_2$
 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
- 5

5. Matched Pair t-Test

Level of significance: 0.05

Enter the Raw data of Before

45 73 46 124 33 57 83 34 26 17

Enter the Raw data of After

36 60 44 119 35 51 77 29 24 11

Matched pair

[9.0, 13.0, 2.0, 5.0, -2.0, 6.0, 6.0, 5.0, 2.0, 6.0]

Mean of the Matched pair data: 5.2

Standard Deviation of the Matched pair data: 4.077035960378842

Mean Difference μ_D : 0

Select the alternative Hypothesis to test with null $\mu_D = 0.0$

1. $\mu_D < 0.0$
2. $\mu_D > 0.0$
3. $\mu_D \neq 0.0$

2

The null must be rejected if $t > 1.8331$

Calculations

$t = 4.03328398196115$

Decision

Null $\mu_D = 0.0$ must be Rejected at level of significance 0.05 and Accept $\mu_D > 0.0$

Process finished with exit code 0