/Users/bps/PycharmProjects/hypothesis_tesing/venv/bin/python /Users/bps/PycharmProjects/hypothesis_tesing/main.py

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

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3. Two Mean Large sample

```
Level of significance: 0.02
No of samples 1: 54
Mean of sample 1: 1.63
Standard deviation of sample/Population 1: 0.177
No of samples 2: 54
Mean of sample 2: 1.77
Standard deviation of sample/Population 2: 0.183
\mu 1 - \mu 2 : 0
Select the alternative Hypothesis to test with null \mu 1 - \mu 2 = 0.0
1. \mu1 - \mu2 < 0.0
2. \mu 1 - \mu 2 > 0.0
3. \mu 1 - \mu 2 \neq 0.0
 The null must be rejected if Z<-2.3263 or Z>2.3263
Calculations
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Z = -4.040890688478767

Decision

Null $\mu 1$ - $\mu 2$ = 0.0 must be Rejected at level of significance 0.02 and Accept $\mu 1$ - $\mu 2 \neq 0.0$

Process finished with exit code 0