

```
/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  $\sigma_1 = \sigma_2$
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

2

2. One Mean Small sample

Level of significance: 0.025

Is the data given in raw format:

1. yes

2. no

1

Enter the Raw data of 1

2.4 2.9 2.7 2.6 2.9 2.0 2.8 2.2 2.4 2.4 2.0 2.5

No of Sample data 12

Mean of the sample data 2.4833333333333334

Standard Deviation of the sample data 0.3128558579902059

Claim Mean: 2.25

Select the alternative Hypothesis to test with null  $\mu = 2.25$

1.  $\mu < 2.25$

2.  $\mu > 2.25$

3.  $\mu \neq 2.25$

2

The null must be rejected if  $t > 2.201$

Calculations

$t = 2.583587157542629$

## Decision

Null  $\mu = 2.25$  must be Rejected at level of significance 0.025 and Accept  $\mu > 2.25$

Process finished with exit code 0