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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
- 1

1. One Mean Large sample

Level of significance: 0.01

No of samples: 80

Mean of sample: 68.45

Standard deviation of sample/Population: 9.583

Claim Mean: 71

Select the alternative Hypothesis to test with null  $\mu = 71.0$

1.  $\mu < 71.0$

2.  $\mu > 71.0$

3.  $\mu \neq 71.0$

1

The null must be rejected if  $Z < -2.3263$

Calculations

$Z = -2.380036874725851$

Decision

Null  $\mu = 71.0$  must be Rejected at level of significance 0.01 and Accept  $\mu < 71.0$

Process finished with exit code 0