**Assignment Question (Data Analytics part 1)**

Determine whether the null hypothesis is rejected or accepted based on test statistic Z value for the following situation.

* A machine is producing perfume bottles with avg of 150 cc and SD of 2 cc.
* Four bottles are picked and average of these samples are found to be 153.8 cc
* Has the average volume changes from 150 cc
* Test with 95% confidence interval
* Alternate Hypothesis: Mean Volume! =150 cc
* Null Hypothesis: Mean Volume = 150 cc
* Alpha = 1- CI = 1-0.95 = 0.05
* Calculate the test statistic Z value (Z value = Sample Mean-Population Mean)/(SD/sqrt(n))

**Note: Submit the solution as python notebook**