1. A pharma company manufactures thousands of tablets every day. The manufacturing team gets a complaint stating that the weight of a tablet named zingx has changed from its actual claimed weight of 100mg with population standard deviation 20. The company wants to test this and submit a report to the concerned authority stating the proof of this complaint. The company takes 50 samples with mean 105 to test this.

What is the Null and alternate hypothesis?

1. *H*0 = 100 and *Ha* ≠ *105*
2. *H*0 = 100 and *Ha* < *105*
3. *H*0 = 100 and *Ha* ≠ *100*
4. *H*0 = 105 and *Ha* ≠ *105*

2. Using the same data perform Z test and test the hypothesis

What is Z value and the result?

a) Reject the Null hypothesis

b) Fail to reject the Null hypothesis

c) Not enough evidence to conclude the result

1. At Ohio University the mean score of scholarship exam for fresh applications is 900 and the population standard deviation is 180. Every year the HOD uses sample applications to determine the change in the examination score. A sample of 200 applications with a sample mean of 935 is used to perform hypothesis test.

What is Z value and the result?

1. The California university performs the hypothesis test for the same scenario as Ohio university on 6 samples with the population mean as 900 with samples as 935,925,850,875,945,915

What is the T value and the result?