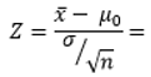
**Assignment 18.1**

Blood glucose levels for obese patients have a mean of 100 with a standard deviation of 15. A researcher thinks that a diet high in raw cornstarch will have a positive effect on blood glucose levels. A sample of 36 patients who have tried the raw cornstarch diet have a mean glucose level of 108. Test the hypothesis that the raw cornstarch had an effect or not.

**Steps**

1. Determine the type of hypothesis testing (Null or Alternate). I will choose Null hypothesis.
2. Based on the data the population mean is 100.
3. As significance level is not mentioned, assume it to be 5% (or 0.05).
4. Calculate the random chance probability, using the following formula:

 108 -100/(15/6) = 3.2

The P-value associated with the Z-value of 3.2 is 0.9993. This means that the probability of having a value less than 108 is 0.9993, while the probability of having a value equal to (or more than) 108 is (1-0.9993), which is equal to 0.0007.

1. As the computed value of 0.0007 is less than the significance level of 0.05, the Null hypothesis test to determine the raw corn-starch effect can be **rejected**.