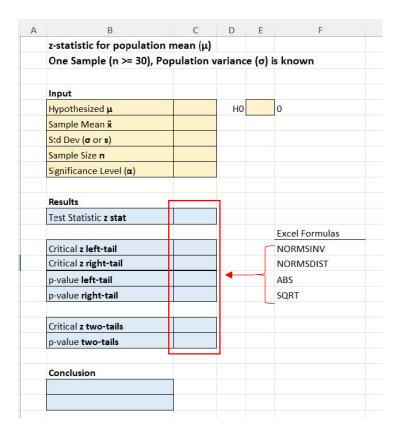
LABORATORY: Hypothesis Testing Simulator

1. In the *hypothesisTesting.xlsx*, write excel formulas to calculate values for hypothesis testing (cells highlighted in blue).

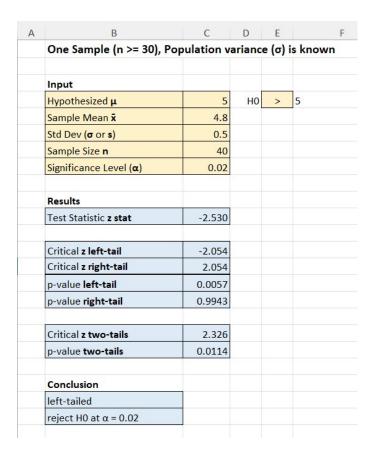
Formulas that you might want to consider using include NORMSINV, NORMSDIST, ABS, SQRT.



When parameters are entered to the input area (yellow cells). Your simulator will then show values and conclusion in blue cells, automatically.

Example:

A factory manufactures cars with a warranty of 5 years on the engine and transmission. An engineer believes that the engine or transmission will malfunction in less than 5 years. He tests a sample of 40 cars and finds the average time to be 4.8 years with a standard deviation of 0.50. At 2% significant level, is there enough evidence to support the idea that the warranty should be revised?



2. Test your simulator on various problems until you are certain that it works perfectly and you truly understand how to use z-statistic for hypothesis testing.

What to submit: the hypothesis testing simulator excel file