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EE325 Section 1: Online Quiz#1

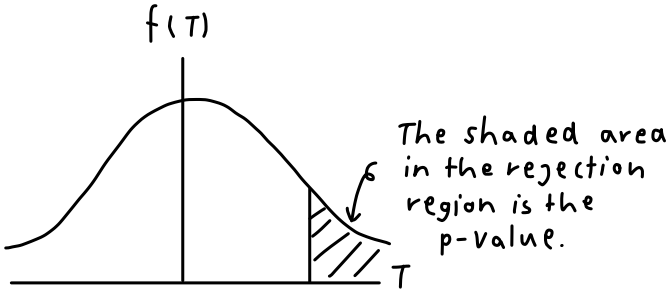
** Required only for those who did not do the in-class quiz on Mar 12th, 2020.

** Due 12noon on Friday 13rd March, 2020. Please submit via Moodle.

1) Why do we have to calculate the t-statistics when doing hypothesis test?

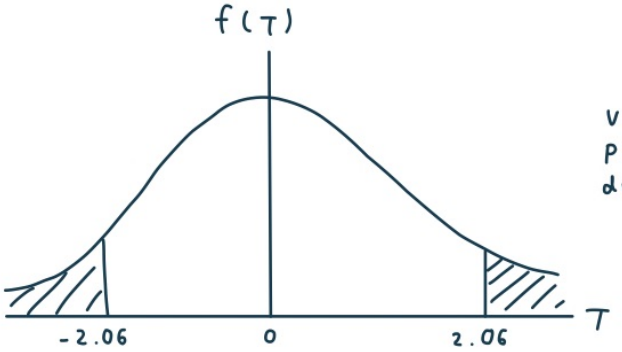
We calculate t-statistic to know the critical value, so that we can know whether this value falls into the rejection region or not. If yes, we reject H_0 and can conclude that ____. (depends on the question. $T = \frac{\hat{\beta}_j - \beta_j}{s.e.(\hat{\beta}_j)}$

2) What is the p-value? Draw a graph to accompany your explanation.



3) What is a 95% confidence interval? How do we calculate it?

$\alpha = 95\% = 0.95$



The 95% CI for $\hat{\beta}_j = [\hat{\beta}_j - 2.06 \cdot s.e.(\hat{\beta}_j), \hat{\beta}_j + 2.06 \cdot s.e.(\hat{\beta}_j)]$

========== END OF THE QUIZ ==========