Assignment - 5

look employees $n = 500$ → 300 X2, → 200L

95% CI

Considers X2 as 1 & 2 as 0

Mean of Sample = $\frac{300}{500} = \frac{3}{5}$

Deviation of sample = $\frac{\sqrt{\left(\frac{2}{5}\right)^2 \times 300 + \left(\frac{3}{5}\right)^2 \times 200}}{\sqrt{500}}$

$= 0.489$

Considering t test

upper fence $\bar{x} + t_{\alpha/2}\left(\frac{s}{\sqrt{n}}\right) = \frac{3}{5} + \frac{(2.064)(0.489)}{100}$

$= 0.61$

lower fence $\bar{x} - t_{\alpha/2}\left(\frac{s}{\sqrt{n}}\right) = 0.589$

X2 shifts should be between 58.9k and 61k

2 shifts should be between 39k and 41.1k