

COSC6323 - Exercise 3

February 2021

Instructions

REPORT CONTENT:

1. Problem solution
2. Commented output of the hypothesis test
3. Your summary for the described problems

SUBMIT:

1. FirstName_LastName.rmd
2. FirstName_LastName.pdf

1 Task 1

Suppose a coin toss turns up 13 heads out of 20 trials. At .05 significance level, can one reject the null hypothesis that the coin toss is fair?

2 Task 2

An outbreak of Salmonella-related illness was attributed to ice cream produced at a certain factory. Scientists measured the level of Salmonella in 9 randomly sampled batches of ice cream. The levels (in MPN/g) are : 0.593, 0.142, 0.329, 0.691, 0.231, 0.793, 0.519, 0.392, 0.418.

Is there evidence that the mean level of Salmonella in the ice cream is greater than 0.3 MPN/g?