ACADGILD

SESSION 9: Statistical Inference

Assignment 1

Table of Contents

1. Introduction

This assignment will help you understand the concepts learnt in the session.

2. Objective

This assignment will test your skills on **theorems and tests** in R.

3. Prerequisites

Not applicable.

4. Associated Data Files

Not applicable.

5. Problem Statement

1. If Z is norm (mean = 0, sd = 1)

   find P(Z > 2.64)

   find P(|Z| > 1.39)

2. Suppose p = the proportion of students who are admitted to the graduate school of the University of California at Berkeley, and suppose that a public relation officer boasts that UCB has historically had a 40% acceptance rate for its graduate school. Consider the data stored in the table UCBAdmissions from 1973. Assuming these observations constituted a simple random sample, are they consistent with the officerâ..s claim, or do they provide evidence that the acceptance rate was significantly less than 40%?
Use an Î± = 0.01 significance level.

6. Expected Format

1. R file should be submitted where applicable.
2. R file should be in PDF or in .r format
3. Proper screenshots of the outputs should be submitted as well
4. The r codes, if submitted in any other format, will be subjected to deduction in marks

Note: Your solution will not be entertained if it is any other format, e.g., .zip, .doc, .rtf etc.

7. Approximate Time to Complete Task

40 mins.