

# Homework 5

Due May 30,2023

## Problem 1

Obtain the Old faithful Geyer data from “<https://www.stat.cmu.edu/larry/all-of-nonpar/data.html>”. Use the first 100 rows as training data to construct 90%, 80%, 60% prediction intervals for waiting time for the remaining 172 data through conformal prediction. Is your prediction correct 90%, 80%, 60% of the time? (Use any nonconformity measure you like.)

## Problem 2

Obtain the Glass Identification Data Set from “<https://archive.ics.uci.edu/ml/datasets/Glass+Identification>”. Randomly select 150 rows as training data to construct 90%, 80%, 60% prediction set for glass type for the remaining data through conformal prediction. Is your prediction correct 90%, 80%, 60% of the time? (Use any nonconformity measure you like.)