Homework 4

Gaurang Kakade

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Link to the Github repository

Due: Sun, Apr 2, 2023 @ 11:59pm

Please read the instructions carefully before submitting your assignment.

- 1. This assignment requires you to only upload a PDF file on Canvas
- 2. Don't collapse any code cells before submitting.
- 3. Remember to make sure all your code output is rendered properly before uploading your submission.

Please add your name to the author information in the frontmatter before submitting your assignment

We will be using the following libraries:

```
packages <- c(
   "dplyr",
   "readr",
   "tidyr",
   "purrr",
   "stringr",
   "corrplot",
   "car",
   "caret",
   "torch",</pre>
```

```
"nnet",
    "broom"
  # renv::install(packages)
  sapply(packages, require, character.only=T)
Loading required package: dplyr
Attaching package: 'dplyr'
The following objects are masked from 'package:stats':
    filter, lag
The following objects are masked from 'package:base':
    intersect, setdiff, setequal, union
Loading required package: readr
Loading required package: tidyr
Loading required package: purrr
Loading required package: stringr
Loading required package: corrplot
corrplot 0.92 loaded
Loading required package: car
Loading required package: carData
Attaching package: 'car'
```

```
The following object is masked from 'package:purrr':
some
The following object is masked from 'package:dplyr':
```

Loading required package: caret

Loading required package: ggplot2

Loading required package: lattice

Attaching package: 'caret'

The following object is masked from 'package:purrr':

lift

recode

Loading required package: torch

Loading required package: nnet

Loading required package: broom

dplyr	readr	tidyr	purrr	stringr	corrplot	car	caret
TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE
torch	nnet	broom					
TRUE	TRUE	TRUE					

Question 1