

Assignment 1

Irfan Kanat

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This is an assignment to evaluate your learning in this module. For each learning activity there is a section in this document. Answer each question below the question and create an R Markdown document for submission.

1 - Installation

In order to be able to create and render R Markdown documents you should have successfully installed R. Hence your submission will be counted as proficiency in installation of R.

2 - Reporting

Successfully rendering this document (after answering questions) counts as proof that you have learned how to create R Markdown documents. In later assignments you will need to create your own R Markdown documents.

3 - Introduction

Variables, Operators

- a - Replace the metadata in the document header to declare you as the author, and change the date to current date (Pst, it is at the very top of this file).
- b - Create a variable named **id** with the last 4 digits of your student number.
- c - Multiply the id variable by 5 and save it in a variable called **idX5**.

Dataframes

For the following questions, get R to execute the following command.

```
admitData <- read.csv("https://stats.idre.ucla.edu/stat/data/binary.csv")
```

- d - Display the first 3 rows of the **admitData**.
- e - Display rows where rank is equal to 1.

Functions

- f - Get R to calculate the square root of idXday variable (sqrt is your friend).
- g - Get R to calculate the mean of GRE scores in **admitData**.

4 - Packages

h - Install and load the psych package in memory.

i - Use the describe() function (should be loaded to memory with psych package) with **admitData** to get descriptive statistics.

5 - Import Data

for the following questions, go to Zillow.com's data site and obtain **ZRI Summary: Multifamily, SFR, Condo/Co-op (Current Month)** dataset by zip code.

j - Save the imported dataset into a **zillow** data.frame.

k - Calculate the mean Zillow Rent Index (ZRI)

BONUS

This is a bit harder, if you feel adventurous combine insights from question e and question g to calculate the mean ZRI for the state of Ohio.