

Student name: _____

KARACHI INSTITUTE OF ECONOMICS & TECHNOLOGY College of Engineering

(Department of Software Engineering)

CS3305 – Data Science and Application

Assignment: 1

Faculty Signature:

Total Marks:

| Student ID: | Date: | |
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| CLOs | PLOs | Blooms Taxonomy |
| CLO-1 | PLO-01: Engineering Knowledge | C3: Applying |
| | | |
| Marks | | |
| Question: 1 | | |
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Question # 1: (Marks: __/10)

The dataset of regional stores along with other parameters are given in a link:

Find the following details by *applying* descriptive statistical methods on the given dataset.

- a. Find the average Squarefeet area that is cover by a store.
- b. State give the maximum area of 20000 sqft to any store. Find outliers by using median method and drop these rows from the data set and verify outliers by IQR (show mathematical calculations of IQR), also show outliers using Boxplot.
- c. Show the skewness of the SquareFeet area of stores.
- d. A new store is open in that territory have area of 3954sqft. and having fall sales = 20123.1 and spring sales = 19541.3, Now find out in which season store earned the most as compared to other stores that have same area that is less than 7000sqft (show mathematical calculations).
- e. Find out is there any relationship between the area of the store and winter sales and also show how strong is this relation (show mathematical calculations).
- f. Further state wants store to take part in an community welfare services and for this purpose they select the name of stores using draw. Show which stores are selected.