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CLASS **:** I M.Sc. DATA ANALYTICS

DATA : MALL_CUSTOMER

DESCRIPTION :

This dataset is downloaded from *kaggle* website. It contains the details of   Mall customers and spending score is given to the Customers. The dataset consist of 200 rows and 5 columns. In this dataset, there are no missing values or null values.

Customer Id   - Unique ID given to customers

Genre   - Gender of customers (class - *chr*)

Binary – 'Male',' Female'

Age   - Age of customers (class – *dbl*)

Customers are from age 18 to 70

Annual income - Income of customers (class – *dbl*)

Income is from 15k to 137k dollars

Spending Score – Score out of 100 given by mall Authorities based on money

Spent and behaviour of Customers (class – *dbl*)

ASSUMPTIONS :

- Out of 100, Which Spending Score is given to maximum number of Customers?
- Which Gender has highest sum of Spending Score?
- Customers of which age group has highest Spending Score?
- Determine the Association between Income and Spending Score.
- Which age Customer has highest Spending Score in Male?
- Which age Customer has highest Spending Score in Female?

INSIGHTS:

1. 41 – 51 Score is given to maximum number of Customers.
2. Customers of Age 31 has the highest sum of Spending Score.
3. Female Customer has the higher sum of Spending score.
4. Income and Spending Score is not correlated.

 # Subsetted Female Customers:

1. Female Customers of Age Group [28 – 38) has highest sum of Spending Score.
2. Customer of Age 30, 31, 32 has the highest Spending Score.
3. Income of Female Customers is not uniformly distributed. More number of Female Customer's income is above the Median Income of Female Customer.

4. Average Income of Age 30, 31, 32 Customers and Average Spending Score of Age 30, 31, 32 is calculated and are correlated.
5. For the Customers of Age 30, Income is low but their Spending Score is high .
6. For the Customers of Age 31, Income and their Spending Score is quite similar.
7. For the Customers of Age 32, Income is High but their Spending Score is low.
8. Income and Spending Score of Female Customer is 0.37314 .

#Subsetted Male Customers:

1. Male Customers of Age group [18, 28) has the highest sum of Spending Score.
2. Customers of Age 19, 26, 27 has the highest Spending Score.
3. Income of Male Customers is not uniformly distributed. More number of Male Customer's income is below the Median Income of Male Customer.
4. Average Income of Age 19, 26, 27Customers and Average Spending Score of Age 19, 26, 27 is calculated and are correlated.
5. For the Customers of Age 19, Income and their Spending Score is quite similar.
6. For the Customers of Age 26, Income and their Spending Score is quite similar.
7. For the Customers of Age 30, Income is high but their Spending Score is low.
8. Income and Spending Score of Male Customer is -0.019573.

INFERENCE:

1. 42 Spending Score is given to maximum number of Customers.
2. Female Customers of Age 31 has the highest Spending Score.
3. Higher Spending Score Female Customers have low Income but high Spending Score.
4. Male Customers of Age 19 has the highest Spending Score.
5. Higher Spending Score Customers of Male have high Income and low Spending Score.
6. The Correlation between Income and Spending Score of Female Customers is Low Positive Correlation.
7. The Correlation between Income and Spending Score of Male Customers is Negligible Negative Correlation (No Correlation).