GRAPHS

Two types of Graphs
1. Categorical
2. Numerical

- Univariate Analysis (Cate or Num)
- Bi variate Analysis (Cate or Num)
- Multivariate Analysis (cate or Num)
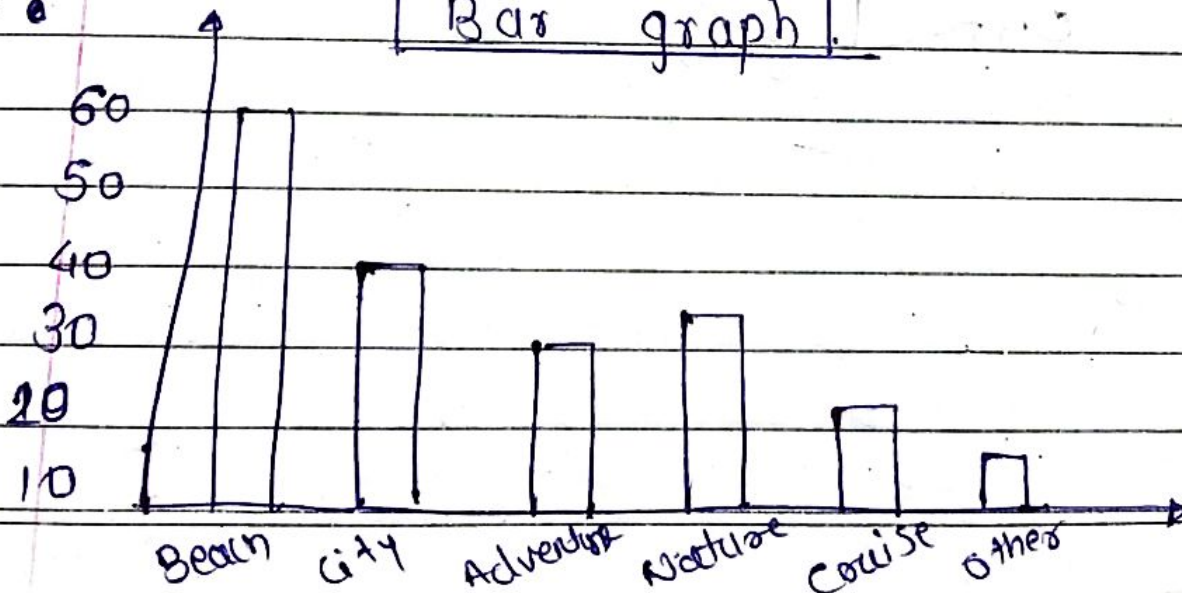- Univariate Analysis

1. Categorical Feature

- Frequency Distribution Table :- FDT is a table that Summarize the number of times (or frequency) that each value occur in dataset.

Ex: Survey of 200 people for vacation

Type of vacation	frequency
Beach	60
City	40
Adventure	30
Nature	35
Cruise	20
Other	15

Category

Bar graph

- **Cumulative frequency :** Is a running total of the frequency

(+) addition

Types of vacation	frequency	cumulative freqⁿ
Beach 60	60	60
city	40	100
Adventure	30	130
Nature	35	165
cruise	20	185
other	15	200

- **Histrogram / Water flow chart or graph**
  (Power BI)
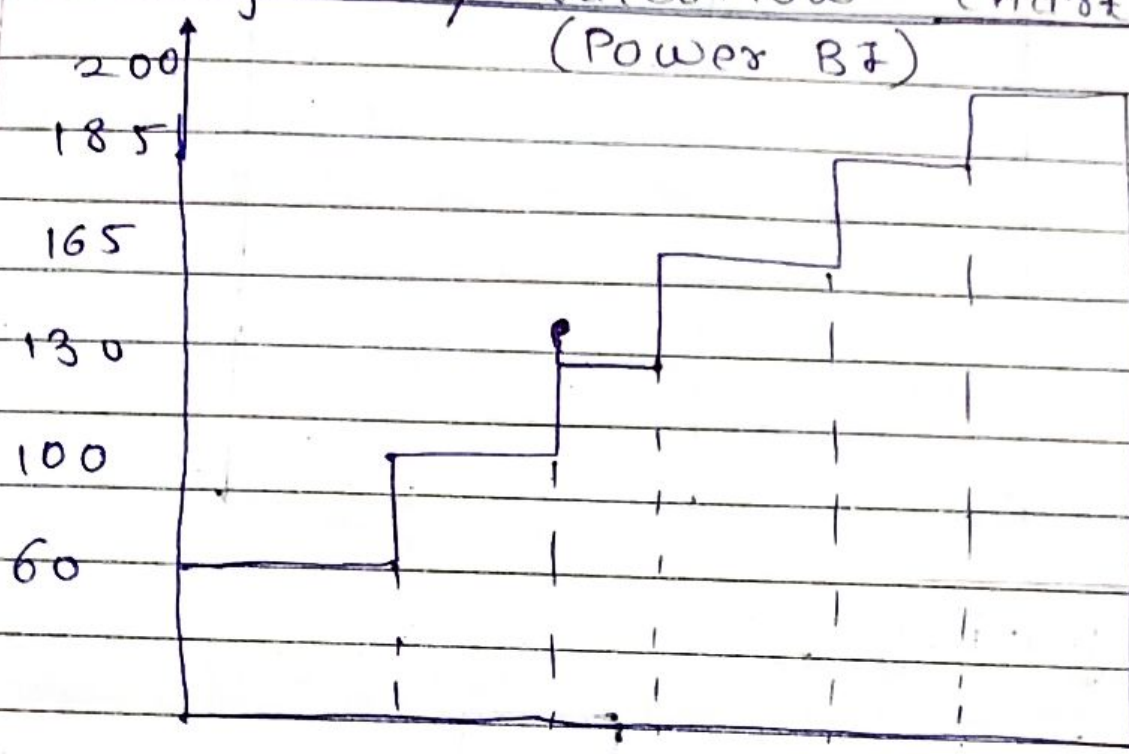
2. Numerical vs Numerical

- ### Scatter Plote

Height feat (y-axis: 1 to 7)
weight — (x-axis: 10 20 30 40 50 60 70 80 kg)
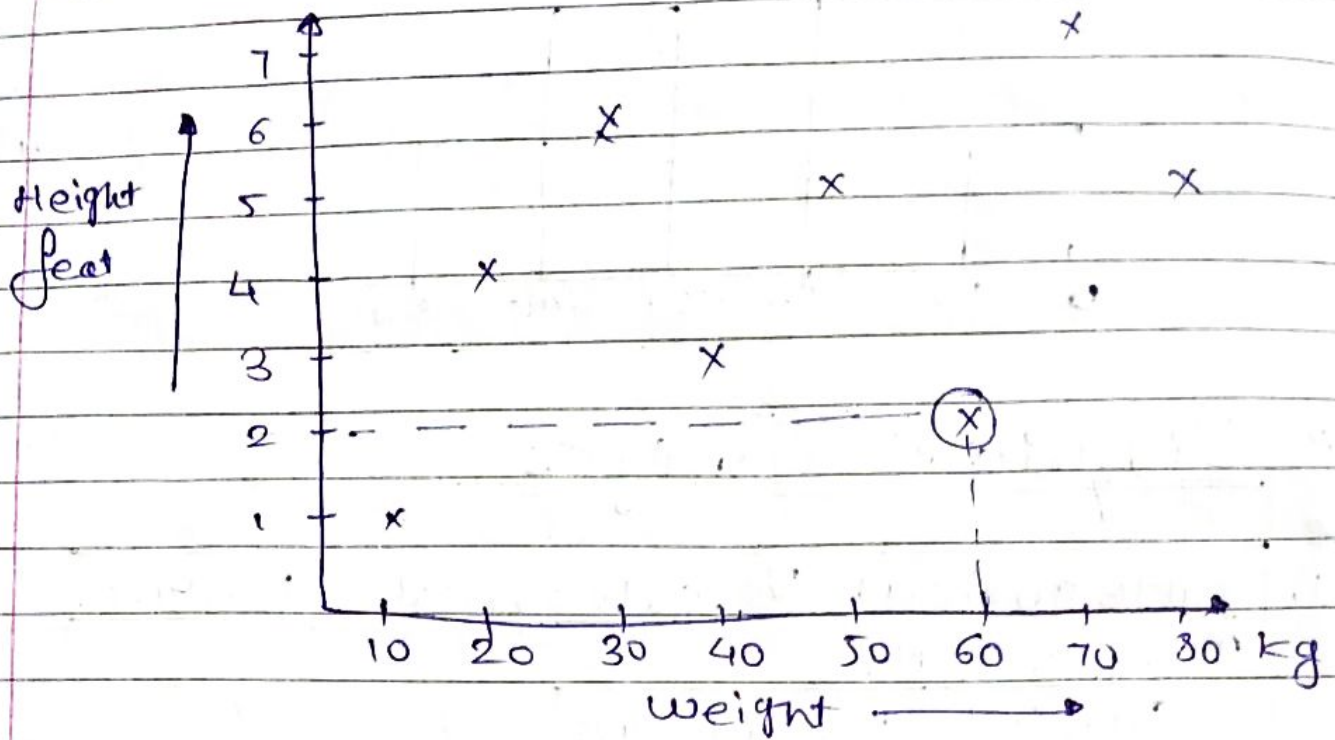
3. Categorical vs Numerical   / Numum vs Cate

Gender	Age	0-10	11-20	21-30
Male	32	32	41	110
female	15	15	18	120

Stack Bar Graph

legend

▨ male

▤ female
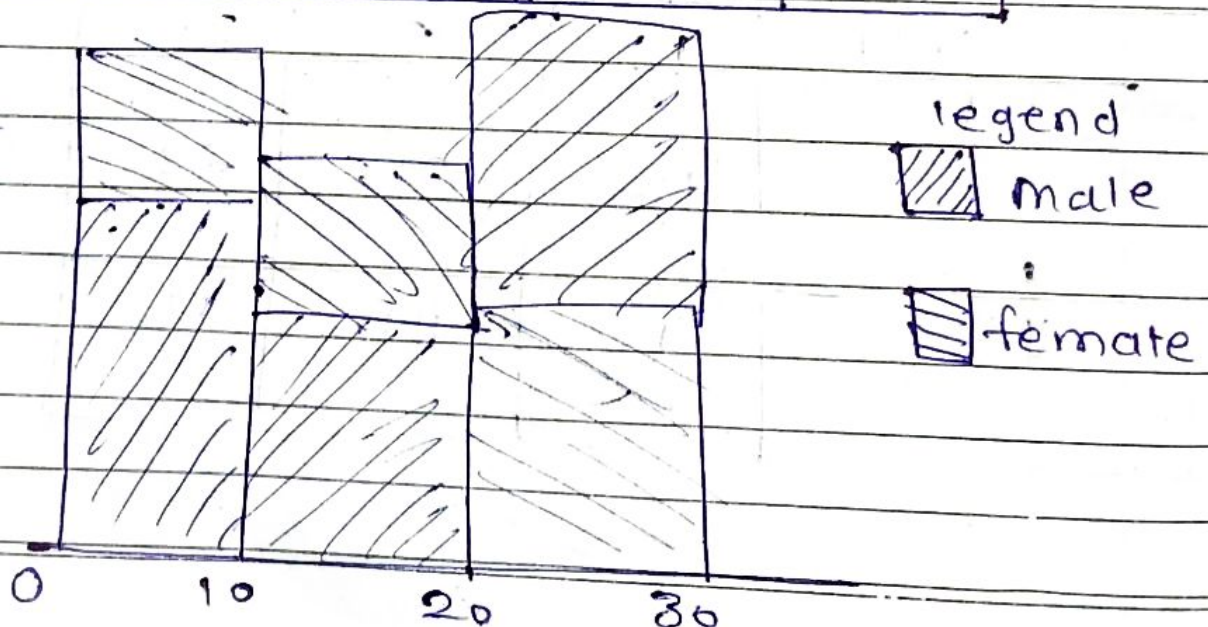
1. **Univariate Analysis**
2. **Numerical feature**

- **Bins frequency table :**

Age	Bins	frequency
08	0-10	2
09	10-20	3
12	20-30	4
15	30-40	3
17	40-50	2
22		
24		
26		
28		
31		
34		
35		
41		
50		

- **Bar graph.**