Median

https://youtu.be/FMj2i-IvaZU

- ## Prerequisites
  - 4.1) Mean
  - 2) Introduction to Measure of Central Tendency- Mean, Median, Mode
  - 1) Representation of Data in Statistics- Ungrouped, Grouped Data Distribution(Discrete & Continuous)
- ## What is Median?

  It is a value separating higher half with the lower half of data sample, a population, or probability distribution
  OR
  Middle value of dataset
- ## Why it is Important?

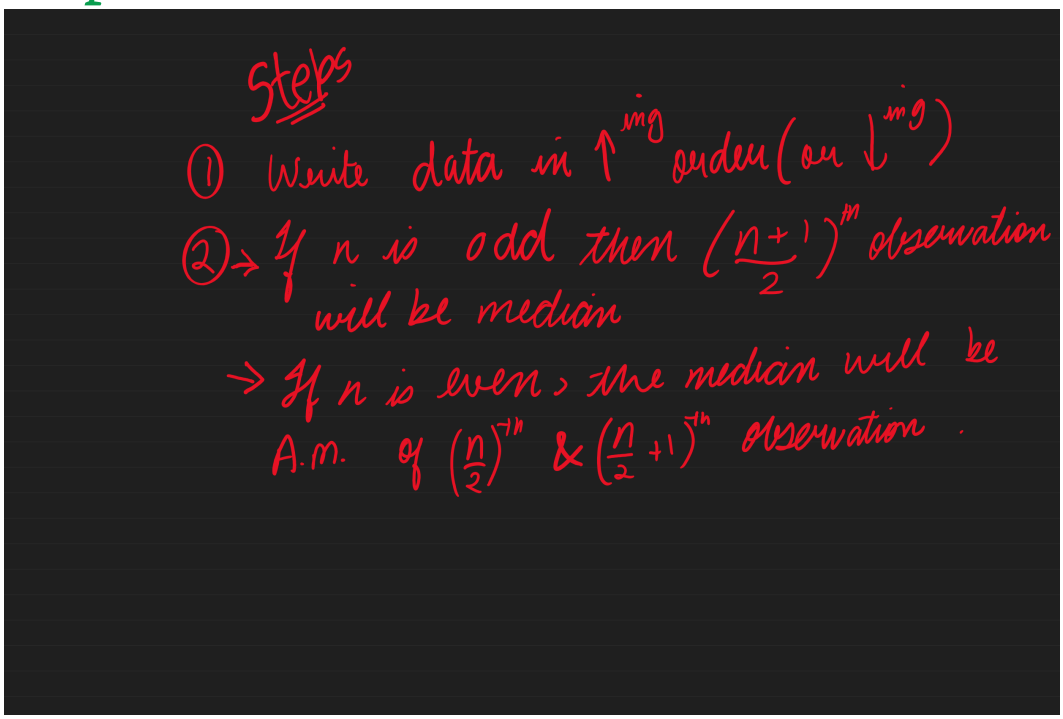
  In Presence of Outliers concepts of mean, variance, standard deviation, etc get

corrupted.

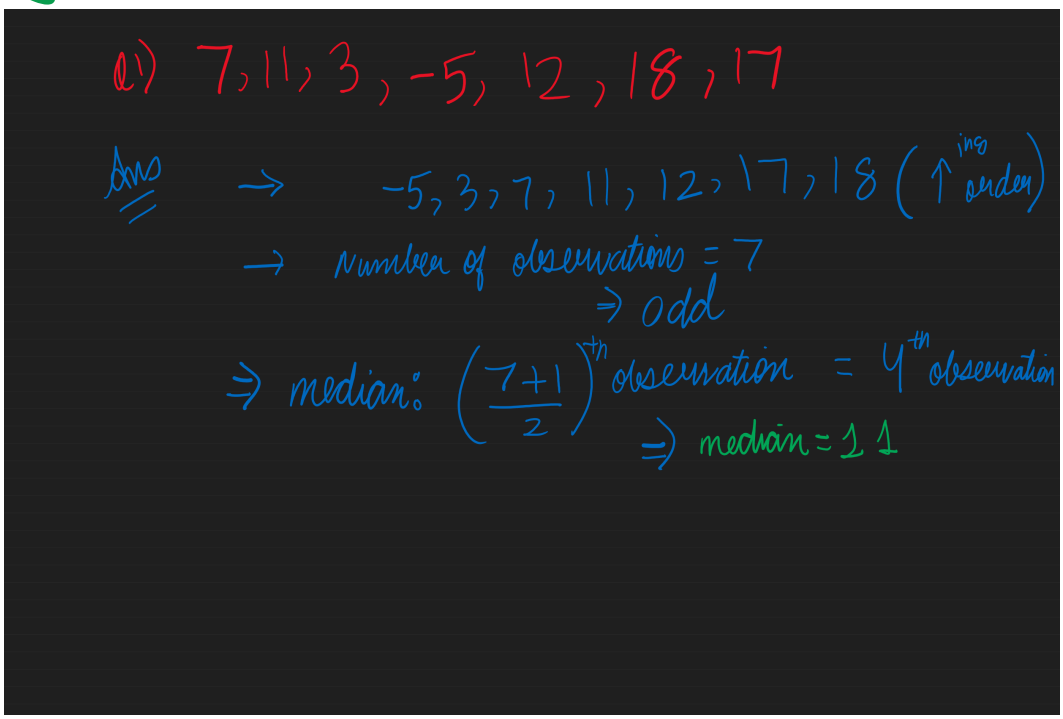
- # Finding Median

  1. ## Type1 (*Sequential Data*)

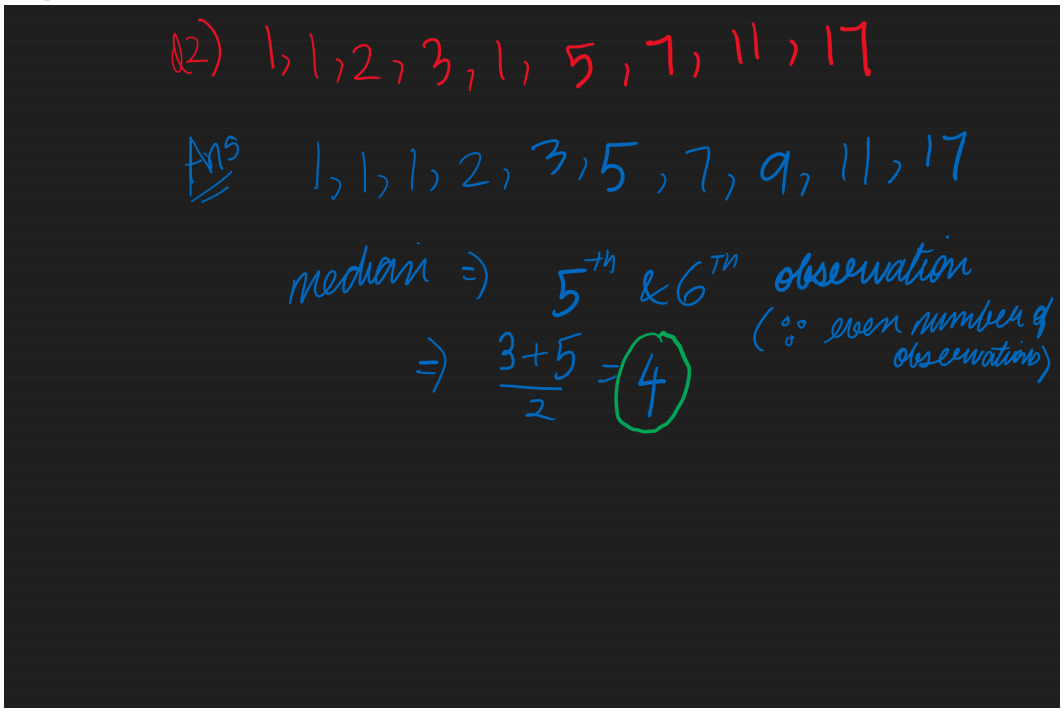
     - *Steps*



- ### Question 1

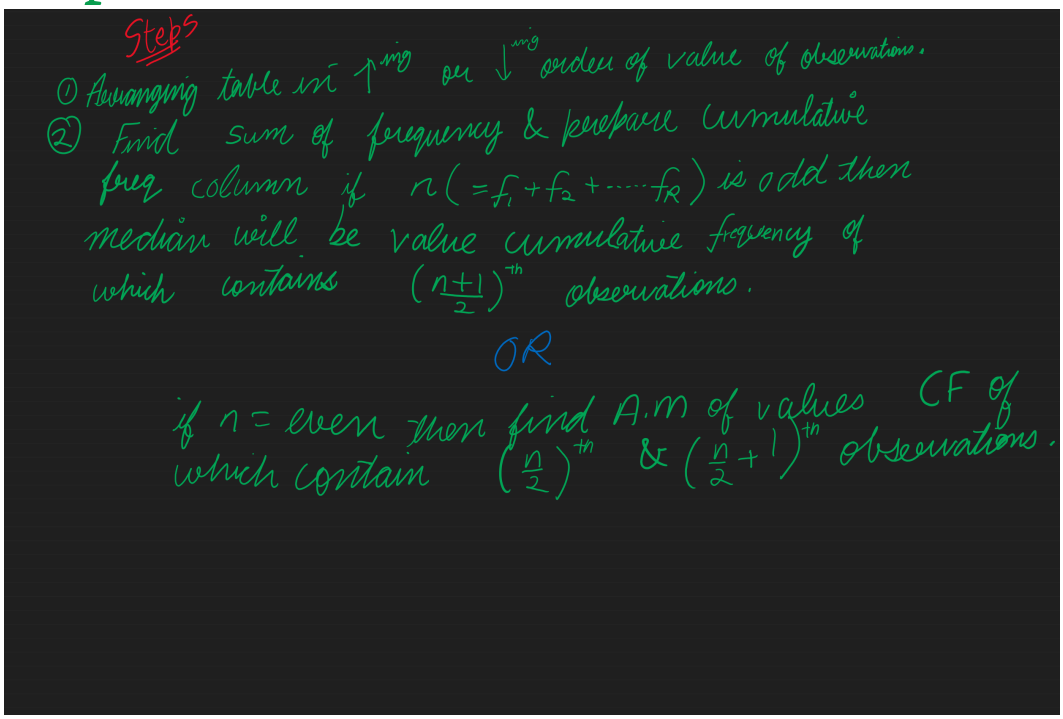


- ### Question 2

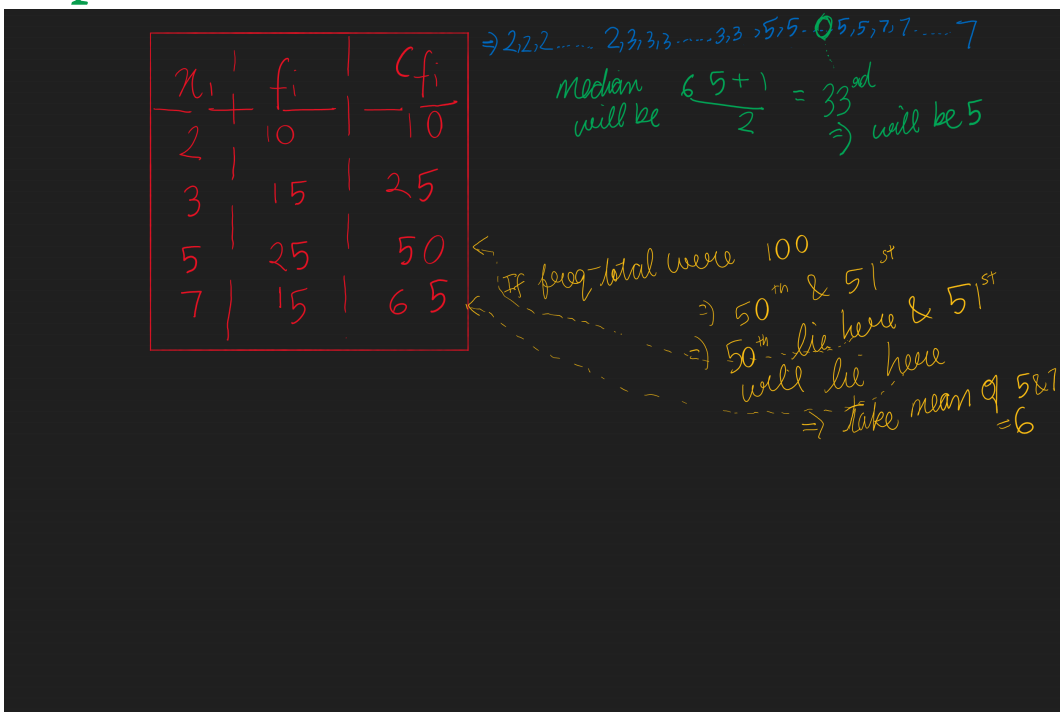


2. Type2 (*Grouped with Single Class Value*)

- ## Steps



- ## Explanation



- ### *Question 1*

Q)

x_i	f_i
10	5
20	15
30	16
40	4

- ### *Answer 1*

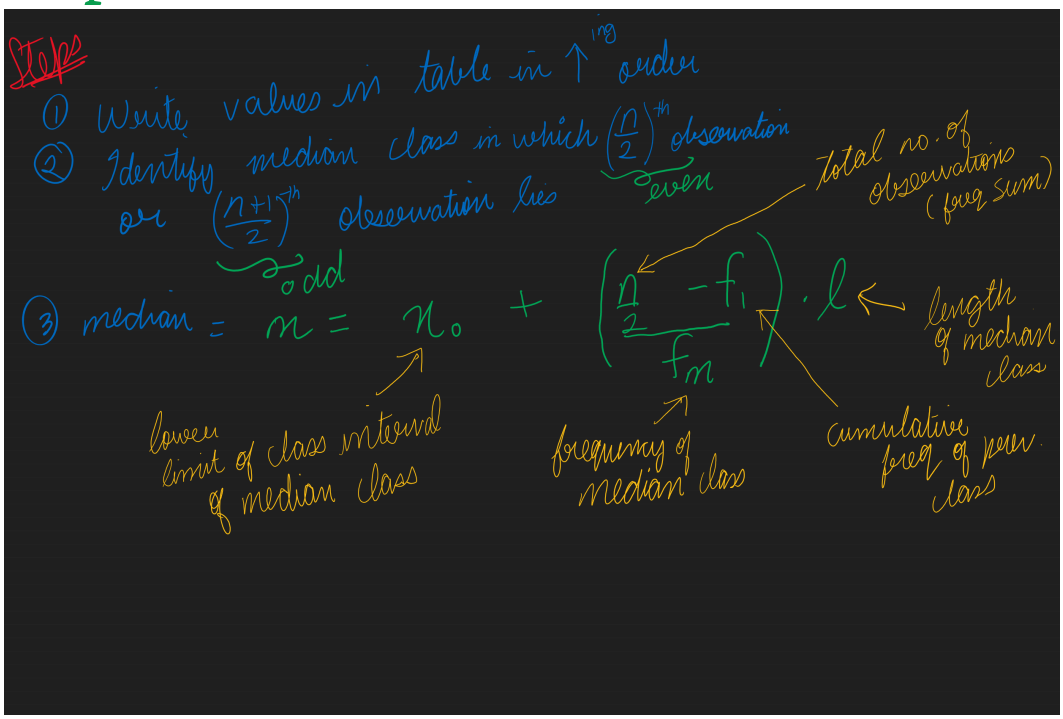
Ans

x_i	f_i	Cf
10	5	5
20	15	20
30	16	36
40	4	40

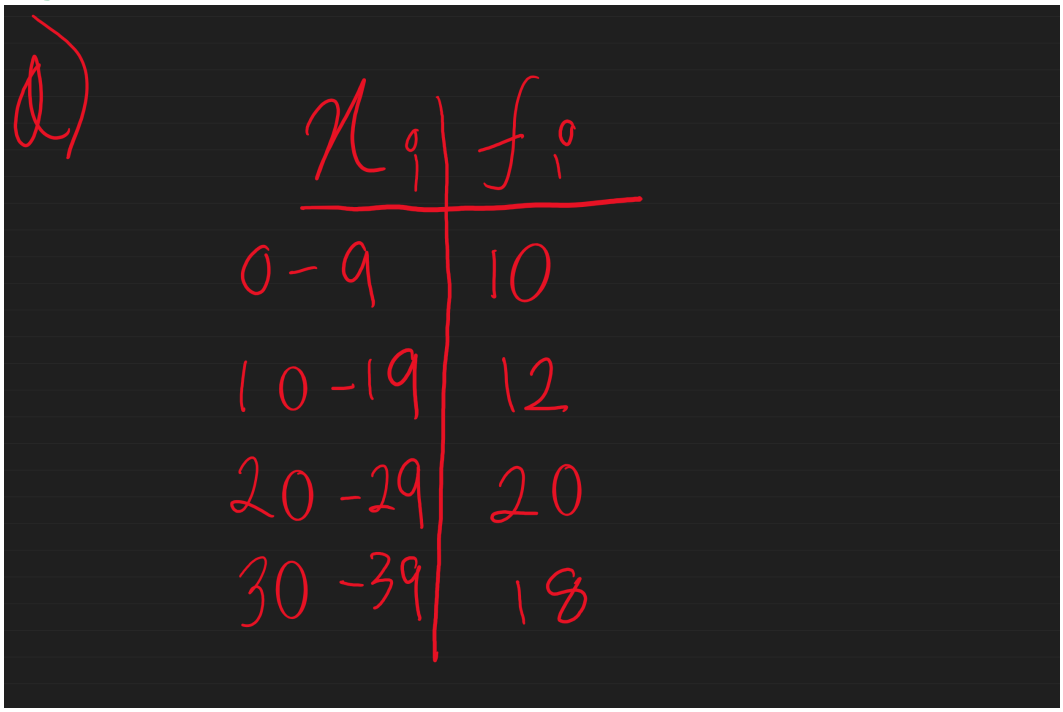
AM of 20^{th} & 21^{st}
= median
$= \frac{20+30}{40}$
$= 25$

3. Type3 (*Grouped with Class Value in Interval*)

- ## Steps



- ## Question 1



- ## Answer 1