~~wed~~

~~7 to 8:10 pm.~~

(1) We use the Aggregate method we Consider The total cost across all the insertions & Calculate the Average Cost per insertion

→ When inserting the i^{th} Element If we re-size An operation is Not Needed the Existing happens cost O(i) as it involved Thes Copying of existing Elements To the New Table of Size.

Accounting method:-

In this method we Assign Each insertion a higher "Anortized Cost of the State.

Pseudo code:-

```
For i:1 to n
  if Table is full
    new table = Create a New table
with size & copy Elements from 1st
(or) past table to New table.
    Table = New table.
Insert Element's i into table.
    initial charge = 0
for i:i to n
    change t=2
If Table doubled in size from into m
      Credits t: m
  Changes = 2*n = O(n)
```

→ Cost per Insertion = total/n

= O(n/n)

= O(1)

Runtime for Insertion = O(1)

for whole process = O(n)