HW-17 Pradeepsinh A Charder 100223163800 = 3600 1000 ed (mpa) m) a. inserting of relement outresing Rundilme por inscribing is objectin) aggregate methodi anii loit The table doubles size in when it runs out of space. So if the original size is I, after insextion, it downter the size mto 2. after 2 more insertion it doubles to reize 4. Minne in tilesys) After k doubling the size is 2h instruction is the son that Pseudo cocle (Madison \* 5/1 initialize table with capacity of I about for i=1 to n; table is full son new table si execute newtable with : Size 24 aurient size copy elements of como old table to new table table = new table side insert element printo table sidest and of

K= log(NII) 1 A None Total cost = o(n) & ssign = o(nlogn) cost per insertion = 0 (logn) Runtime per insertione is Ologn) Total time is o (n) + log (n+1) b) accounting method, day 47790 1 81 25'18 Unighte 24 1 62 12093 to Change Zunit for each Insertion when the table double in size from m to 2m, Credit mounits. Afrec & daubling the size is 24 Total credit is mtzmthmt6m. n/2 \* m= 6(n) show alies Pseudo Cocles de Mico side established Iniatialize table with capacity = Alies planted on the stoom was jable is full: new table = Create newtable with size x correct size gid copy element from old table to new table

insert element i into table iniatialize changes =0 initialize credits = 0 for 1=1 to n: changes t=2 if table doubled in size from m to 2m credits t=m Total charges = 2×n = o(n) Total creelits = m+2m. n12# m=0(n) Got per insertion = total/n z o(n)/n =0(1) Runtime per insertion = O(1) Total Hime = O(n).