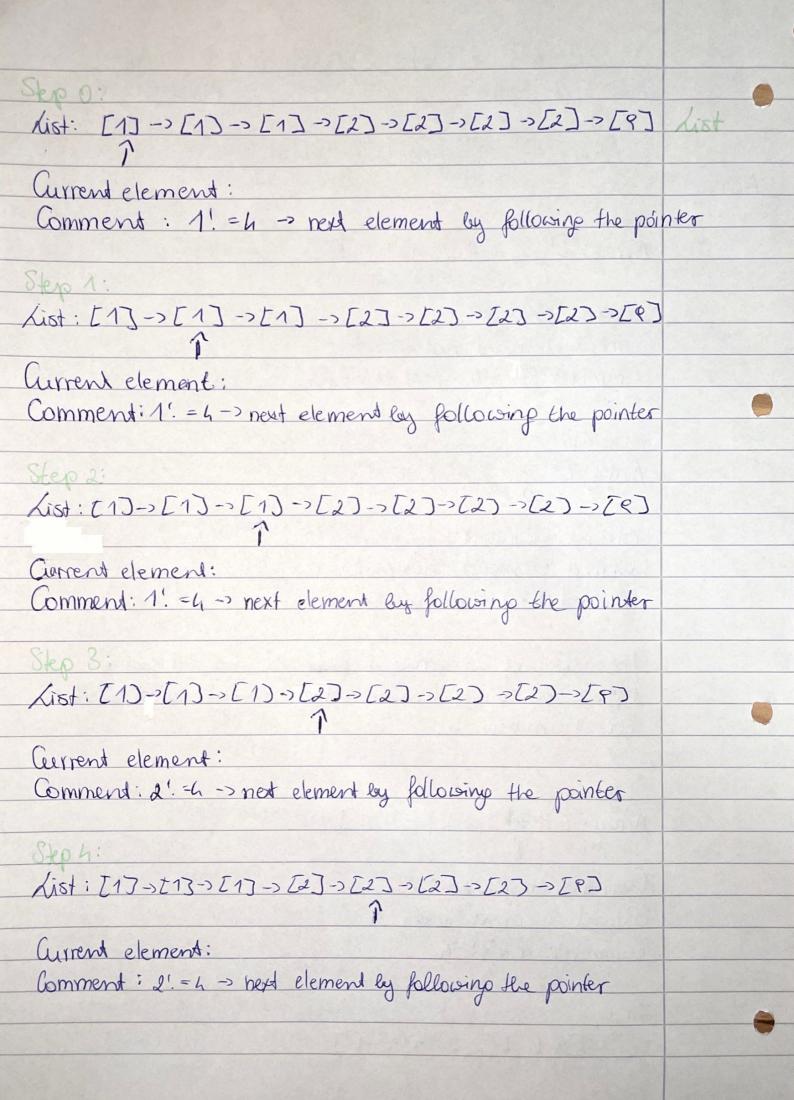
Alporithms & Deta Structures 1 Ass. 02 K12211228 Ayre Sude Boli 1. Array vs. Simple linked list Arrey Array: [9,2,2,2,2,1,1,1] Current element: Current element index:0 Comment: 9! - 4 next element Array: [9,2,2,2,2,1,1,1] Current element: Current element index: 1 Comment 472 Insertion point The size of an array is fixed. So we bosically replace the first number in the fitting index with the number h. Step 2: Array: [9,4,2,2,2,1,1,1] Current element: Current element index 1 Commend: insert 4 Thus, [9,4,2,2,1,1,1]



Step 5: List: [10-5[1]-5[1]-5[2]-5[2]-5[2]-5[9] Current element: Comment: 2:=4 -> next element by following the pointer Step 6: List: [1]->[1)->[1]->[2]->[2]->[2]->[2]->[2]->[9] Current element: Commend: 2!=4 -> next element by following the pointer List: [1)-11]-[1]-[2]-[2]-[2]-[2]-[2]-[2] Current element: Comment: 9> h, since the noole [9] > h, we create a new node I43 List: [1] -[1) -[1) -[2) -[2) -[2) -[2) -[2] New noole: [4] Current element: We inserted the new node, so that the pointer of [27 points to Ind and the pointer of Eud points to [9].