1 Linet nove Aniket Gupta 2022073



DSA HW-5

Q1. struct node * insert-pos (struct node * head, struct node * n, int pos) { if (pos == 0) } (*n) next = head;

return n;

struct node * try = head;

int v=0;

while (i!= pos-1 @ && tmp) } tmp = (*+mp). next;

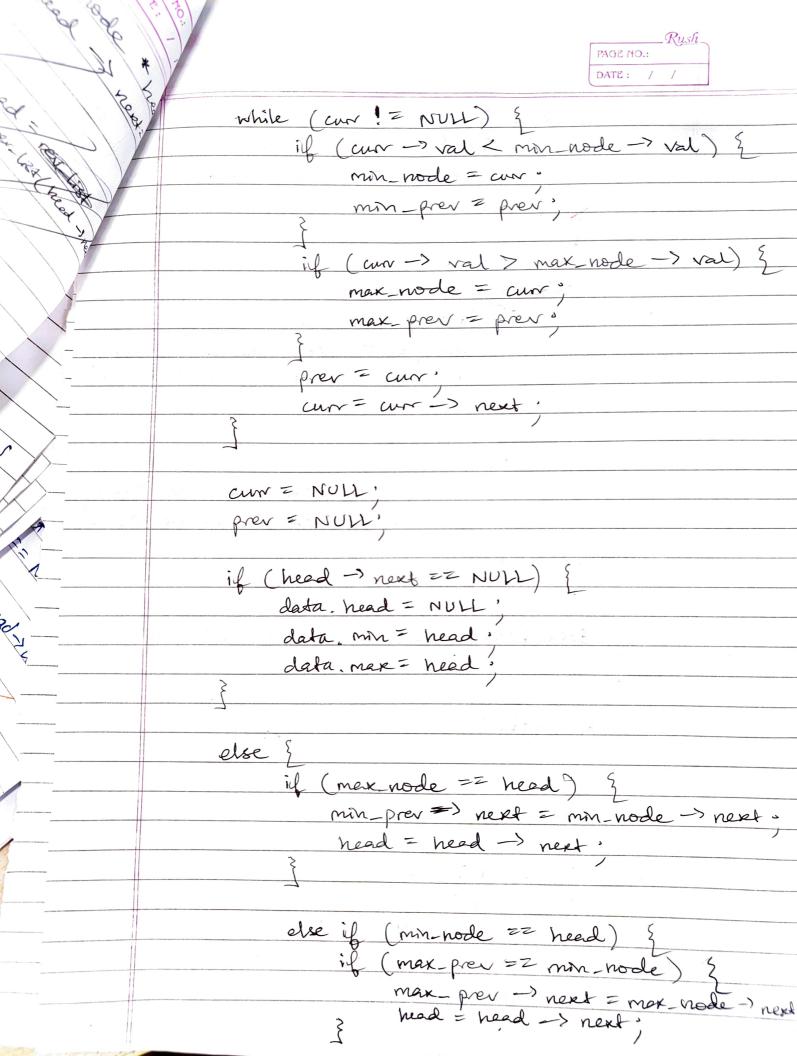
if (tmp!= NULL) {
 (*n), next = (*tmp). next;

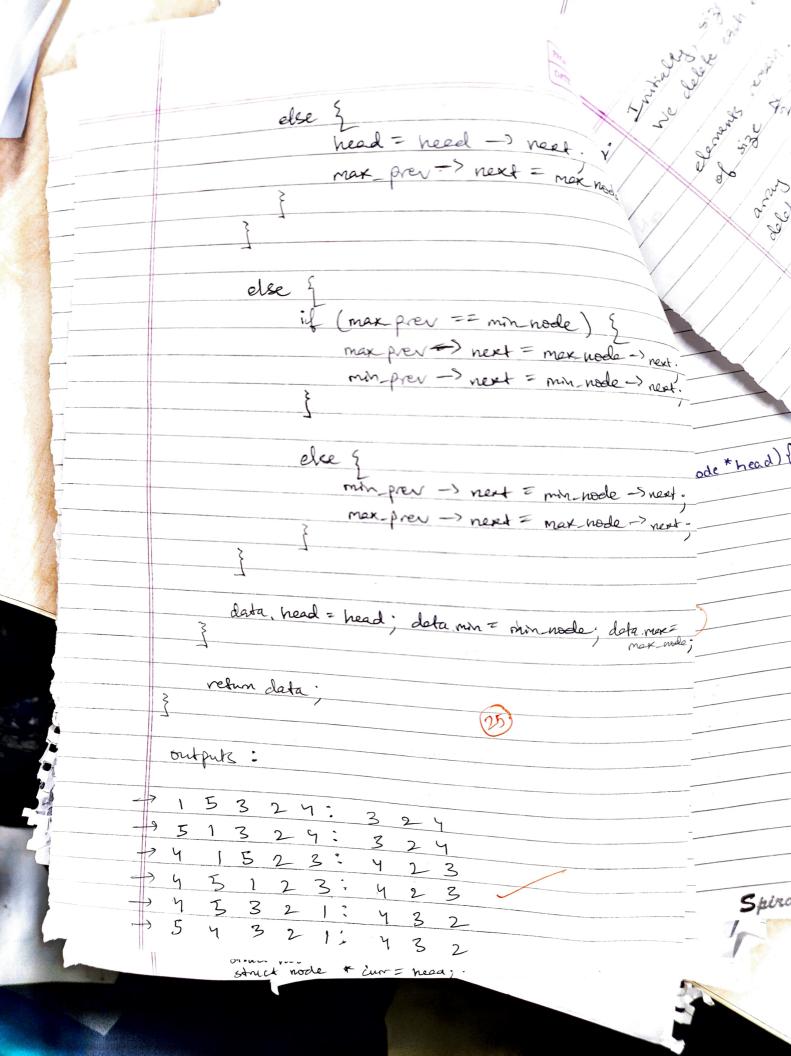
(* tomp) - next = n;

return head.

P.T.D

Man Cont. 11 Story One Jan The day 85 struct node * crex-list (struct node if (head == NULL / head = return head; Struct node * general list head = head -> next -> next = Weed: head - / next = NOLL. struct node * reversed-list (struct node * head) { Q3. if (head == NULL || head -> next == NULL) return head. (5 struct node * reversed list_head = reversed (head - next); head -> next -> next = head; head -> next = NULL. - t (hea return reversed _ list_head; Struct delete_info delete min_max (struct made * head) { struct delete-info data. data head = NULL. data min = NULL, data_mex = NULL; if (need == NULL) return data; struct node * min prev = NULL; struct node * max prev = NULL struct node * mm node = head iral struct node * max-node = heed;
struct node * prev = NULL;
struct node * cur = need;





Initially size of array is N with Nelements we delete each element one by one, until, N elements remain. Now we create a new away of size is and copy in elements from old array to new array free the old array and delete an element in new array. This marks the completion of first phase. We continue this process for K phases so that, at the end, we are left with only one element in the array Phase no of elevents copied N 1P N/2k+1 we stop this when N = 1 = 1 × KE Log_N-1 Alocation Overhead Let wort of allocating a new away and freezy the old array be 1. Since there are K allocations theefore, allocation overhead = K = log_N - 1

