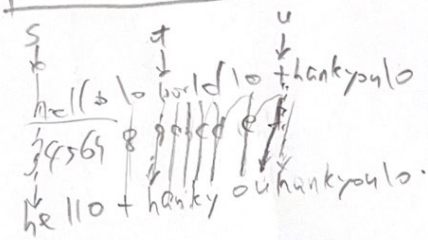
1.

0x7ffc15fc5430	0
0x7ffc15fc543C	3
0x7ffc15fc5448	6
0x7ffc15fc5454	9

2.

name: Hyun-Jin Ryu
age: 32
SO: 3
name: Shin-Soo Choo
age: 37
HR: 24



3. hellothankyouhankyou
hankyouhankyou
hankyou

4. -1 -1 0 0 1 2 1 2 3 0 1 2

5.

0 inserted. (front: -1 rear: 0)
1 inserted. (front: -1 rear: 1)
0 deleted. (front: 0 rear: 1)
1 deleted. (front: 1 rear: 1)
2 inserted (front: 1 rear: 2)
queue reorganized. (front: -1 rear: 0)
3 inserted (front: -1 rear: 1)
2 deleted (front: 0 rear: 1)
3 deleted (front: 1 rear: 1)

6. (1) DBGEHACIJF
(2) ABDEGHCFIJ
(3) DGHEBJIFCA

7. (1) stack[++top] = item;

(2) return stack[top--];

8. (1) if(curr->data == key) return i;
curr = curr->link;
i++;

10 (2) if (prev == NULL) newNode->link = head;
else {
newNode->link = prev->link;
prev->link = newNode;

(3) printf("%d ", curr->data);
curr = curr->link;

11.

9. (1) newnode→rlink = node→rlink;
node→rlink→llink = newnode;
node→rlink = newnode;

(2) deleted→llink→rlink = deleted→llink;
deleted→rlink→llink = deleted→rlink;

10. (1) 5 leaf nodes (E, F, D, H, J)

(2) Yes, maximum degree doesn't exceed two.

(3) No, there are node child nodes of D and H.

11. $O(1)$, $O(\log n)$, $O((\log n)^2)$, $O(\sqrt{n})$, $O(n)$, $O(n\log n)$, $O(n^2)$, $O(2^n)$

12. (1) $O(n^3)$

(2) $O(n \log n)$

(3) $O(n \cdot 2^n)$

(4) $O(n^2)$