6) b) WAP to implement Single link list to stimulate Stack and Queue operations.

(i) Stack

```
void push(int value) {
    Struct Node* newNode = createNode(value);
    newNode→ next = top;
    top = newNode;
    return top; }
Void pop() {
    if (top == NULL) {
        return; }
    Struct Node* temp = top;
    top = top→ next;
    free (temp); }
    return top; }
```

(ii) Queue

```
void enqueue (int value) {
    Struct Node* newNode = CreateNode (value);
    if (rear == NULL) {
        front = rear = newNode; }
    else { rear→ next = newNode;
        rear = newNode; }
void dequeue() {
    if (front == NULL) {
        return; }
    Struct Node * temp = front;
    front = front→ next;
    if (front == NULL) {
        rear == NULL; }
    free (temp); }
```

Execute

O/P

1. push (stack)
2. pop (stack)
3. Display stack
4. Enqueue (Queue)
5. Dequeue (Queue)
6. Display Queue
7. Exit.

→ Enter your choice : 1
How many values to push : 3
Enter 3 values : 1 2 3

→ Enter your choice : 2
Popped element is : 3.

→ Enter your choice : 3
Stack : 2 1

→ Enter your choice : 4
How many values to enqueue : 3
Enter 3 values : 2 4 6

→ Enter your choice : 5
Dequeued element : 2

→ Enter your choice : 6
Queue : 4 6

→ Enter your choice : 7
Exiting.

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