

7. Linked List Simulation

```
C:\Users\aruna\Desktop\1BM24CS056>gcc LL.c -o LL.exe
```

```
C:\Users\aruna\Desktop\1BM24CS056>LL.exe
```

```
***** MAIN MENU *****
```

1. Push an element
2. Pop an element
3. Peek an element
4. Display the Stack
5. Enqueue an element
6. Dequeue an element
7. Peek an element
8. Display the queue
9. EXIT

```
Enter your option : 4
```

```
The elements in the stack
```

```
Stack is empty.
```

```
***** MAIN MENU *****
```

1. Push an element
2. Pop an element
3. Peek an element
4. Display the Stack
5. Enqueue an element
6. Dequeue an element
7. Peek an element
8. Display the queue
9. EXIT

```
Enter your option : 1
```

```
Enter the number to be inserted into stack: 1
```

```
1 pushed to stack.
```

```
***** MAIN MENU *****
1. Push an element
2. Pop an element
3. Peek an element
4. Display the Stack
5. Enqueue an element
6. Dequeue an element
7. Peek an element
8. Display the queue
9. EXIT
Enter your option : 1
```

```
Enter the number to be inserted into stack: 2
2 pushed to stack.
```

```
***** MAIN MENU *****
1. Push an element
2. Pop an element
3. Peek an element
4. Display the Stack
5. Enqueue an element
6. Dequeue an element
7. Peek an element
8. Display the queue
9. EXIT
Enter your option : 1
```

```
Enter the number to be inserted into stack: 3
3 pushed to stack.
```

```
***** MAIN MENU *****
1. Push an element
2. Pop an element
3. Peek an element
4. Display the Stack
5. Enqueue an element
6. Dequeue an element
7. Peek an element
8. Display the queue
```

```
8. Display the queue  
9. EXIT  
Enter your option : 4
```

```
The elements in the stack  
Stack elements: 3 2 1
```

```
***** MAIN MENU *****  
1. Push an element  
2. Pop an element  
3. Peek an element  
4. Display the Stack  
5. Enqueue an element  
6. Dequeue an element  
7. Peek an element  
8. Display the queue  
9. EXIT
```

```
Enter your option : 3
```

```
The number peeked is : 3
```

```
***** MAIN MENU *****  
1. Push an element  
2. Pop an element  
3. Peek an element  
4. Display the Stack  
5. Enqueue an element  
6. Dequeue an element  
7. Peek an element  
8. Display the queue  
9. EXIT
```

```
Enter your option : 2
```

```
3 popped from stack.
```

```
The number poped is : 3
```

```
***** MAIN MENU *****  
1. Push an element  
2. Pop an element  
3. Peek an element  
4. Display the Stack  
5. Enqueue an element
```

```
8. Display the queue
```

```
9. EXIT
```

```
Enter your option : 4
```

```
The elements in the stack
```

```
Stack elements: 2 1
```

```
***** MAIN MENU *****
```

1. Push an element
2. Pop an element
3. Peek an element
4. Display the Stack
5. Enqueue an element
6. Dequeue an element
7. Peek an element
8. Display the queue
9. EXIT

```
Enter your option : 8
```

```
The elements in the queue
```

```
Queue is empty.
```

```
***** MAIN MENU *****
```

1. Push an element
2. Pop an element
3. Peek an element
4. Display the Stack
5. Enqueue an element
6. Dequeue an element
7. Peek an element
8. Display the queue
9. EXIT

```
Enter your option : 5
```

```
Enter the number to be inserted in the queue : 6
```

```
6 enqueued to queue.
```

***** MAIN MENU *****

1. Push an element
2. Pop an element
3. Peek an element
4. Display the Stack
5. Enqueue an element
6. Dequeue an element
7. Peek an element
8. Display the queue
9. EXIT

Enter your option : 5

Enter the number to be inserted in the queue : 7
7 enqueueued to queue.

***** MAIN MENU *****

1. Push an element
2. Pop an element
3. Peek an element
4. Display the Stack
5. Enqueue an element
6. Dequeue an element
7. Peek an element
8. Display the queue
9. EXIT

Enter your option : 5

Enter the number to be inserted in the queue : 8
8 enqueueued to queue.

***** MAIN MENU *****

1. Push an element
2. Pop an element
3. Peek an element
4. Display the Stack
5. Enqueue an element
6. Dequeue an element
7. Peek an element
8. Display the queue
9. EXIT

Enter your option : 8

The elements in the queue

Queue elements: 6 7 8

***** MAIN MENU *****

1. Push an element
2. Pop an element
3. Peek an element
4. Display the Stack
5. Enqueue an element
6. Dequeue an element
7. Peek an element
8. Display the queue
9. EXIT

Enter your option : 7

The number peeked is : 6

***** MAIN MENU *****

1. Push an element
2. Pop an element
3. Peek an element
4. Display the Stack
5. Enqueue an element
6. Dequeue an element
7. Peek an element
8. Display the queue
9. EXIT

Enter your option : 6

***** MAIN MENU *****

1. Push an element
2. Pop an element
3. Peek an element
4. Display the Stack
5. Enqueue an element
6. Dequeue an element
7. Peek an element
8. Display the queue
9. EXIT

Enter your option : 6

6 dequeued from queue.

The number dequeued is : 6

***** MAIN MENU *****

1. Push an element
2. Pop an element
3. Peek an element
4. Display the Stack
5. Enqueue an element
6. Dequeue an element
7. Peek an element
8. Display the queue
9. EXIT

Enter your option : 8

The elements in the queue

Queue elements: 7 8