

SU92-BSSEM-S24-037

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LAB 7

## OUTPUT

```
Before inserting at the middle:
Doubly Linked List: 10 <--> 15 <--> 20 <--> 30 <--> 40
Reversed Doubly Linked List: 40 <--> 30 <--> 20 <--> 15 <--> 10

After inserting at the middle:
Doubly Linked List: 10 <--> 15 <--> 20 <--> 25 <--> 30 <--> 40
Reversed Doubly Linked List: 40 <--> 30 <--> 25 <--> 20 <--> 15 <--> 10

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Process exited after 0.2516 seconds with return value 0
Press any key to continue . . . |
```

## Explanation

**Insertion at the Beginning:** Adds a node at the head of the list.

**Insertion at the End:** Adds a node at the tail of the list.

**Insertion at the Middle:** Adds a node roughly in the middle of the list.

**Insertion at a Specific Position:** Adds a node at any given position in the list (provided the position is valid).

**Display the List:** Displays all nodes in the list in order, as well as in reverse.