

OUTPUT:

*The insert first & insert last functions:

```
"D:\Sandy\college\lvl.4 sem.2\data structure\oop\youssef ahmed gaber ahmed\main.exe"
0. to Exit program
1. Insert first product
2. Insert last product
3. Insert a product in a specific position
4. DeleteFirst product
5. DeleteLast product
6. DeletePosition product
7. displayForward product
8. displayBackward product
9. find product
10. modify product
11. checkPharmacy
Enter your choice: 1
Enter product name:
medicine1
Enter product price:
20.5
Enter product quantity:
4

0. to Exit program
1. Insert first product
2. Insert last product
3. Insert a product in a specific position
4. DeleteFirst product
5. DeleteLast product
6. DeletePosition product
7. displayForward product
8. displayBackward product
9. find product
10. modify product
11. checkPharmacy
Enter your choice: 2
Enter product name:
medicine2
Enter product price:
46
Enter product quantity:
30
```

*Exit program:

```
0. to Exit program
1. Insert first product
2. Insert last product
3. Insert a product in a specific position
4. DeleteFirst product
5. DeleteLast product
6. DeletePosition product
7. displayForward product
8. displayBackward product
9. find product
10. modify product
11. checkPharmacy
Enter your choice: 0
Exiting program...

Process returned 0 (0x0)   execution time : 736.719 s
Press any key to continue.
```

*The insert in specific position function

```
0. to Exit program
1. Insert first product
2. Insert last product
3. Insert a product in a specific position
4. DeleteFirst product
5. DeleteLast product
6. DeletePosition product
7. displayForward product
8. displayBackward product
9. find product
10. modify product
11. checkPharmacy
Enter your choice: 3
Enter position:
2
Enter new name:
medicine3
Enter new price:
86.5
Enter new quantity:
5

0. to Exit program
1. Insert first product
2. Insert last product
3. Insert a product in a specific position
4. DeleteFirst product
5. DeleteLast product
6. DeletePosition product
7. displayForward product
8. displayBackward product
9. find product
10. modify product
11. checkPharmacy
Enter your choice: 3
Enter position:
3
Enter new name:
medicine4
Enter new price:
38
Enter new quantity:
60
```

```
0. to Exit program
1. Insert first product
2. Insert last product
3. Insert a product in a specific position
4. DeleteFirst product
5. DeleteLast product
6. DeletePosition product
7. displayForward product
8. displayBackward product
9. find product
10. modify product
11. checkPharmacy
Enter your choice: 3
Enter position:
4
Enter new name:
medicine5
Enter new price:
22.5
Enter new quantity:
1
```

*Display forward:

```
Enter your choice: 7
the name of the medicine is: medicine1
the price of the medicine is: 20.5
the quantity of the medicine is: 4
the name of the medicine is: medicine3
the price of the medicine is: 86.5
the quantity of the medicine is: 5
the name of the medicine is: medicine4
the price of the medicine is: 38
the quantity of the medicine is: 60
the name of the medicine is: medicine5
the price of the medicine is: 22.5
the quantity of the medicine is: 1
the name of the medicine is: medicine2
the price of the medicine is: 46
the quantity of the medicine is: 30
```

*Display backward:

```
0. to Exit program
1. Insert first product
2. Insert last product
3. Insert a product in a specific position
4. DeleteFirst product
5. DeleteLast product
6. DeletePosition product
7. displayForward product
8. displayBackward product
9. find product
10. modify product
11. checkPharmacy
Enter your choice: 8
the name of the medicine is: medicine2
the price of the medicine is: 46
the quantity of the medicine is: 30
the name of the medicine is: medicine5
the price of the medicine is: 22.5
the quantity of the medicine is: 1
the name of the medicine is: medicine4
the price of the medicine is: 38
the quantity of the medicine is: 60
the name of the medicine is: medicine3
the price of the medicine is: 86.5
the quantity of the medicine is: 5
the name of the medicine is: medicine1
the price of the medicine is: 20.5
the quantity of the medicine is: 4
```

*Find location of the node

```
0. to Exit program
1. Insert first product
2. Insert last product
3. Insert a product in a specific position
4. DeleteFirst product
5. DeleteLast product
6. DeletePosition product
7. displayForward product
8. displayBackward product
9. find product
10. modify product
11. checkPharmacy
Enter your choice: 9
Enter name:
medicine3
location : 1
```

*Modify the list:

```
2. Insert last product
3. Insert a product in a specific position
4. DeleteFirst product
5. DeleteLast product
6. DeletePosition product
7. displayForward product
8. displayBackward product
9. find product
10. modify product
11. checkPharmacy
Enter your choice: 10
Enter index:
3
Enter new name:
medicine33
Enter new price:
89.5
Enter new quantity:
2

0. to Exit program
1. Insert first product
2. Insert last product
3. Insert a product in a specific position
4. DeleteFirst product
5. DeleteLast product
6. DeletePosition product
7. displayForward product
8. displayBackward product
9. find product
10. modify product
11. checkPharmacy
Enter your choice: 7
the name of the medicine is: medicine1
the price of the medicine is: 30
the quantity of the medicine is: 5
the name of the medicine is: medicine3
the price of the medicine is: 43
the quantity of the medicine is: 5
the name of the medicine is: medicine4
the price of the medicine is: 67
the quantity of the medicine is: 80
the name of the medicine is: medicine33
the price of the medicine is: 89.5
the quantity of the medicine is: 2
the name of the medicine is: medicine2
the price of the medicine is: 34
the quantity of the medicine is: 23
```


***Check the pharmacy, if there is a low quantity of a medicine:**

```
0. to Exit program
1. Insert first product
2. Insert last product
3. Insert a product in a specific position
4. DeleteFirst product
5. DeleteLast product
6. DeletePosition product
7. displayForward product
8. displayBackward product
9. find product
10. modify product
11. checkPharmacy
Enter your choice: 11
Low quantity for product medicine1. Quantity: 5
Low quantity for product medicine3. Quantity: 5
Low quantity for product medicine33. Quantity: 2
Invalid choice.
```

***Delete first, last & a specific position product:**

```
8. displayBackward product
9. find product
10. modify product
11. checkPharmacy
Enter your choice: 4

0. to Exit program
1. Insert first product
2. Insert last product
3. Insert a product in a specific position
4. DeleteFirst product
5. DeleteLast product
6. DeletePosition product
7. displayForward product
8. displayBackward product
9. find product
10. modify product
11. checkPharmacy
Enter your choice: 5

0. to Exit program
1. Insert first product
2. Insert last product
3. Insert a product in a specific position
4. DeleteFirst product
5. DeleteLast product
6. DeletePosition product
7. displayForward product
8. displayBackward product
9. find product
10. modify product
11. checkPharmacy
Enter your choice: 6
Enter product position:
2
```