```
Enter an infix expression or 'quit' to exit the program: 45+
The postfix expression is: 45+=9
Enter an infix expression or 'quit' to exit the program: ((4+5)
*[4+3])
The postfix expression is: 45+43+* = 63
Enter an infix expression or 'quit' to exit the program: ((4+5)
*[4+3]
The expression is invalid due to unbalanced parentheses.
Enter an infix expression or 'quit' to exit the program: quit
1. Enqueue
2. Dequeue
3. Front
4. Size
5. Display all elements
Enter your choice: 1
Enter an integer number: 5
5 has been engueued Do you want to continue? y
1. Enqueue
2. Dequeue
3. Front
4. Size
5. Display all elements
Enter your choice: 2
The data dequeued is: 5
Do you want to continue? y
1. Enqueue
2. Dequeue
3. Front
4. Size
5. Display all elements
Enter your choice: 3
Queue is empty
Do you want to continue? y
1. Enqueue
2. Dequeue
3. Front
4. Size
5. Display all elements
Enter your choice: 4
```