Code:

```
#include <iostream>
using namespace std;

const int  maxSize= 5;

int queue[maxSize];
int front = -1;
int rear = -1;

bool isEmpty() {
   return (front == -1 && rear == -1);
}

bool isFull() {
   return (rear == maxSize - 1);
}

void enqueue(int x) {
   if (isFull()) {
      cout << "Error: Queue full! Enqueue not possible." << endl;
   } else {
      if (isEmpty()) {
         front = rear = 0;
      } else {
```

```
            rear++;
        }
        queue[rear] = x;
        cout << "Enqueued: " << x << endl;
    }
}

void dequeue() {
    if (isEmpty()) {
      cout << "Error: Queue is empty! Dequeue not possible." << endl;
    } else {
        if (front == rear) {
            front = rear = -1;
        } else {
            front++;
        }
    }
}

int frontElement() {

    return queue[front];
}

void showQueue() {
```

```
    if (isEmpty()) {
        cout << "Error: Cannot show queue because it is empty." <<endl;
    } else {
        cout << "Queue elements: ";
        for (int i = front; i <= rear; i++) {
            cout << queue[i] << " ";
        }
       cout << endl;
    }
}

int main() {
    enqueue(5);
    enqueue(6);
    enqueue(8);
    enqueue(10);

    showQueue();

    dequeue();
    showQueue();

    dequeue();
    showQueue();
```

```
    dequeue();
    showQueue();

    cout << "Is the queue empty? " << (isEmpty() ? "Yes" : "No") <<
endl;

    return 0;
}
```