

## Write a program in Java to insert and remove elements in a queue

```
package com.simpli;

import java.util.Arrays;

public class MyQueueMain {

    public static void main(String[] args) {
        // TODO Auto-generated method stub

        MyQueue myQ = new MyQueue();

        myQ.enqueue(10);
        myQ.enqueue(20);
        myQ.enqueue(30);
        myQ.enqueue(40);
        myQ.enqueue(50);

        myQ.printQueue();
    }
}

class MyQueue {

    int SIZE = 5;
    int items[] = new int[SIZE];
    int front, rear;

    MyQueue() {
        front = -1;
        rear = -1;
    }

    // helper methods

    boolean isEmpty() {
        if (front == -1)
            return true;
        else
            return false;
    }

    boolean isFull() {
        if (front == 0 && rear == SIZE - 1) {
            return true;
        }
        return false;
    }

    // operations
    void enqueue(int element) {

        if (isFull()) {
            System.out.println("Queue is full");
        } else {
            if (front == -1)
                front = 0;
            rear++;

            items[rear] = element;
            System.out.println("Inserted "+ element);
        }
    }
}
```

```
    }  
    }  
void printQueue() {  
    System.out.println(Arrays.toString(items));  
}  
}
```

## OUTPUT

```
Inserted 10  
Inserted 20  
Inserted 30  
Inserted 40  
Inserted 50  
[10, 20, 30, 40, 50]
```