

14. Write a C program to implement Queue operations such as ENQUEUE, DEQUEUE and Display

```
#include <stdio.h>

int queue[SIZE];
int front = -1, rear = -1;

void enqueue(int value) {
    if (rear == SIZE - 1) {
        printf("Queue is full\n");
    } else {
        if (front == -1)
            front = 0;
        rear++;
        queue[rear] = value;
        printf("Inserted: %d\n", value);
    }
}

void dequeue() {
    if (front == -1 || front > rear) {
        printf("Queue is empty\n");
    } else {
        printf("Deleted: %d\n", queue[front]);
        front++;
    }
}

void display() {
    if (front == -1 || front > rear) {
        printf("Queue is empty\n");
    }
}
```

```
    } else {  
        printf("Queue: ");  
        for (int i = front; i <= rear; i++) {  
            printf("%d ", queue[i]);  
        }  
        printf("\n");  
    }  
}  
  
int main()  
{  
    enqueue(10);  
    enqueue(20);  
    enqueue(30);  
  
    display();  
  
    dequeue();  
    display();  
  
    return 0;  
}
```

Output

```
C:\Users\saire\OneDrive\Desk × + ▾
Inserted: 10
Inserted: 20
Inserted: 30
Queue: 10 20 30
Deleted: 10
Queue: 20 30

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Process exited after 0.1955 seconds with return value 0
Press any key to continue . . . |
```