

# Queue using CPP

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

class Queue
{
private:
    int front;
    int rear;
    int size;
    int *Q;
public:
    Queue(){front=rear=-1;size=10;Q=new int[size];}
    Queue(int size){front=rear=-1;this-
>size=size;Q=new int[this->size];}
    void enqueue(int x);
    int dequeue();
    void Display();
};

void Queue::enqueue(int x)
{
    if(rear==size-1)
        printf("Queue Full\n");
    else
    {
        rear++;
        Q[rear]=x;
    }
}

int Queue::dequeue()
{
    int x=-1;
    if(front==rear)
        printf("Queue is Empty\n");
    else
```

```
{
    x=Q[front+1];
    front++;
}
return x;
}

void Queue::Display()
{
    for(int i=front+1;i<=rear;i++)
        printf("%d ",Q[i]);
    printf("\n");
}

int main()
{
    Queue q(5);

    q.enqueue(10);
    q.enqueue(20);
    q.enqueue(30);

    q.Display();

    return 0;
}
```