

```
#include <stdio.h>
```

```
int f=-1,r = -1;
```

```
int q[5];
```

```
void enqueue(int e) //inserting an element on to the queue
```

```
{  
    if(((r + 1) % 5) == f) //% reminder of the integer division  
    {  
        printf("\nQueue is full");  
    }  
    else  
    {  
        if(f == -1)  
        {  
            f = 0;  
        }  
        r = ((r + 1) % 5);  
        q[r] = e;  
    }  
}
```

```
void dequeue()
```

```
{  
    if(f == -1)  
    {  
        printf("\nQueue Empty");  
    }  
    else  
    {  
        printf("\nItem : %d",q[f]);  
    }  
}
```

```
    if(f == r)
    {
        f = r = -1;
    }
    else
    {
        f = ((f + 1) % 5);
    }
}
```

```
int main()
{
    enqueue(10);
    enqueue(20);
    enqueue(30);
    dequeue();
    enqueue(40);
    enqueue(50);
    enqueue(60);
    enqueue(70);
    dequeue();
    dequeue();
    dequeue();
    dequeue();
    dequeue();
    return 0;
}
```