

```
#include <stdio.h>

# define SIZE 3

void enqueue();

void dequeue();

void show();

int inp_arr[SIZE];

int Rear = - 1;

int Front = - 1;

main()
{
    int ch;
    while (1)
    {
        printf("1.Enqueue Operation\n");
        printf("2.Dequeue Operation\n");
        printf("3.Display the Queue\n");
        printf("4.Exit\n");
        printf("Enter your choice of operations : ");
        scanf("%d", &ch);
        switch (ch)
        {
            case 1:
                enqueue();
                break;
            case 2:
                dequeue();
                break;
            case 3:
                show();
                break;
            case 4:
```

\]

```
    exit(0);  
    default:  
        printf("Incorrect choice \n");  
    }  
}  
}
```

void enqueue()

```
{  
    int insert_item;  
    if (Rear == SIZE - 1)  
        printf("Overflow \n");  
    else  
    {  
        if (Front == - 1)  
  
            Front = 0;  
        printf("Element to be inserted in the Queue\n : ");  
        scanf("%d", &insert_item);  
        Rear = Rear + 1;  
        inp_arr[Rear] = insert_item;  
    }  
}
```

void dequeue()

```
{  
    if (Front == - 1 || Front > Rear)  
    {  
        printf("Underflow \n");  
        return ;  
    }
```

```
}  
else  
{  
    printf("Element deleted from the Queue: %d\n", inp_arr[Front]);  
    Front = Front + 1;  
}  
}
```

```
void show()
```

```
{  
  
    if (Front == - 1)  
        printf("Empty Queue \n");  
    else  
    {  
        printf("Queue: \n");  
        for (int i = Front; i <= Rear; i++)  
            printf("%d ", inp_arr[i]);  
        printf("\n");  
    }  
}
```