

## **/\*Linear queue i.e lab number 2\*/**

### **Method 1:**

```
#include<stdio.h>
#include<conio.h>
#include<process.h>
#define max 5
int rear=-1,front=0,count=0;
int queue[max];
void enqueue()
{
    if(rear==max-1)
        printf("The queue is full\n");
    else
    {
        int a;
        printf("Enter the data to be inserted\n");
        scanf("%d",&a);
        rear=rear+1;
        queue[rear]=a;
        count++;
    }
}

void dequeue()
{
    if(rear<front)
        printf("The queue is empty\n");
    else
    {
        printf("The data deleted from the queue is %d\n",queue[front]);
        front++;
        count--;
    }
}

int main()
{
    int choice;
    clrscr();
    do
    {
        if(count==0)
        {
            rear=-1;
            front=0;
        }
        printf("\nEnter your choice:\n1.Enqueue\n2.Dequeue\n3.Exit\n");
        scanf("%d",&choice);
        switch(choice)
```

```

        {
            case 1:
                enqueue();
                break;
            case 2:
                dequeue();
                break;
            case 3:
                exit(0);
        }
    }while(choice<=3);
    getch();
    return 0;
}

```

## **/\*Linear queue i.e lab number 2\*/**

### **Method: 2**

```

#include<stdio.h>
#include<conio.h>
#include<process.h>
#define max 5
int rear=0,front=0;
int queue[max];
void enqueue()
{
    if(rear==max)
        printf("The queue is full\n");
    else
    {
        int a;
        printf("Enter the data to be inserted\n");
        scanf("%d",&a);
        queue[rear]=a;
        rear=rear+1;
    }
}

void dequeue()
{
    if(rear==front)
        printf("The queue is empty\n");
    else
    {
        printf("The data deleted from the queue is %d\n",queue[front]);
        front++;
    }
}

```

```
int main()
{
    int choice;
    clrscr();
    do
    {
        printf("\nEnter your choice:\n1.Enqueue\n2.Dequeue\n3.Exit\n");
        scanf("%d",&choice);

        switch(choice)
        {
            case 1:
                enqueue();
                break;

            case 2:
                dequeue();
                break;
            case 3:
                exit(0);
        }
    }while(choice<=3);
    getch();
    return 0;
}
```