```c
#include<stdio.h>
#define MAX 5
typedef struct
{
        int item[MAX],rear,front;
}Queue;

void initialization( Queue * q)
{
      q->rear=q->front=-1;
}

void enqueue(Queue * q , int x)
{
      if (q->front==(q->rear+1)%MAX)
      printf("\n Queue is Overflow");
      else
      {
      if (q->rear==-1 && q->front==-1)
      q->rear=q->front=0;
      else
      q->rear=(q->rear + 1 )%MAX;
      q->item[q->rear]=x;
}
}

int dequeue(Queue * q)
{
      int x;
      if (q->front<=-1)
      printf("\n Queue is Underflow");
      else
      {
            x=q->item[q->front];
            if (q->front==q->rear)
            q->rear=q->front=-1;
            else
            q->front=(q->front+1)%MAX;
      }
      return x;
}

      void display(Queue * q)
   { int i;
    if (q->front<=-1)
      printf("\n Queue is Underflow");
      else
      {
            for(i=q->front;i<=q->rear;i++)
            printf("\n|%d|",q->item[i]);
            if(q->front>q->rear)
            {
                  for(i=q->front;i<=MAX-1;i++)
                  printf("\n|%d|",q->item[i]);
```

```c
                    for(i=0;i<=q->rear;i++)
                    printf("\n|%d|",q->item[i]);
              }
        }

}


main()
{
      int choice,option,data;
      Queue q;
      initialization(&q);
      do

      {
            printf("\n 1- Enqueue \n 2- Dequeue \n 3- Display");
            printf("\n Enter your choice");
            scanf("%d",&option);
            switch(option)
            {
                  case 1:printf("\n Enter the Data");
                            scanf("%d",&data);
                            enqueue(&q,data);
                              break;
                  case 2:printf("\n Deleted Data is %d",dequeue(&q));
                            break;
                   case 3:display(&q);
                              break;
                   default:printf("\n Wrong Choice");
                   }
                   printf("\n Doyou continue(1/0)");
                   scanf("%d",&choice)      ;
            }while(choice==1);


      }
```