

```

1  #include <stdio.h>
2  #define qsize 4
3
4
5  void enqueue (int *data,int *head,int *tail,int item)
6  {
7
8      if (((*tail)+1)%(qsize+1)== (*head))
9          printf("Queue is Full\n");
10
11  /* else if ( (*tail) >0 && (*head) > qsize-1)
12
13      (*head)=0;*/
14
15      else
16      {
17          data[*tail]=item;
18          (*tail)=((*tail)+1)%(qsize+1);
19      }
20  }
21
22  int dequeue (int *data,int *head,int *tail)
23  {
24      int item;
25  /*if( (*head) >0 && (*tail) > qsize-1)
26      (*tail)=0;
27  */
28
29      if( (*tail) == (*head))
30      {
31          printf("\nQueue is empty\n");
32          return -1;
33      }
34
35      item = data[(*head)];
36      (*head)=((*head)+1)%(qsize+1);
37
38      return item;
39  }
40  }
41
42  int main (void)
43  {
44      {
45          int data[qsize+1];
46          int head=0,tail=0;
47          int n,item;
48          for(;;)
49          {
50              printf("\n\nEnter the Operation to proceed: 1.Enqueue 2. Dequeue\n");
51              scanf("%d",&n);
52              if(n==1)
53              {
54                  printf("Enter The Data For Enqueue : ");
55                  scanf("%d",&item);
56                  enqueue(data,&head,&tail,item);
57              }
58              if(n==2)
59              {
60                  printf("Dequeued Value : ");
61                  int x=dequeue (&data,&head,&tail);
62                  printf("%d",x);
63              }
64          }
65          return 0;
66      }

```

