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1: #include <stdio.h>
2: #include <stdlib.h>
3: #define n 5
4: int queue[n];
5: int back = 0;
6: int front = 0;
7: int enqueue(int data);
8: int dequeue();
9: void print();
10: int main()
11: {
12:     int ch, data;
13:     while (1)
14:     {
15:         printf("1. Enqueue 2. Dequeue 3. Display 0. Quit\n");
16:         printf("Give your choice: ");
17:         scanf("%d", &ch);
18:         switch (ch)
19:         {
20:             case 1:
21:                 printf("Enter number to enqueue: ");
22:                 scanf("%d", &data);
23:                 if (enqueue(data))
24:                     printf("Enqueue operation successful");
25:                 else
26:                     printf("Queue is full");
27:                 break;
28:             case 2:
29:                 data = dequeue();
30:                 if(data)
31:                     printf("Data => %d", data);
32:                 else
33:                     printf("Queue is empty");
34:                 break;
35:             case 3:
36:                 print();
37:                 break;
38:             case 0:
39:                 exit(0);
40:             default:
41:                 printf("Invalid choice");
42:         }
43:         printf("\n");
44:     }
45: }
46: int enqueue(int data)
47: {
48:     if (back==n)
49:     {
50:         return 0;
51:     }
52:     queue[back] = data;
53:     back = back + 1;
54:     return 1;
55: }
56: int dequeue()
57: {
58:     if (front==back)
59:     {
60:         return 0;
61:     }

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62:     else
63:     {
64:         int data = queue[front];
65:         front = front + 1;
66:         return data;
67:     }
68: }
69: void print()
70: {
71:     if(front!=back)
72:     {
73:         for(int i=front;i<back;i++)
74:         {
75:             printf("%d ",queue[i]);
76:         }
77:     }
78: }
```