

main.c

Share

Run

```
2 #define SIZE 5
3 int queue[SIZE];
4 int front = 0, rear = -1;
5 void enqueue(int value) {
6     if (rear == SIZE - 1) {
7         printf("Queue full!\n");
8     } else {
9         rear++;
10        queue[rear] = value;
11        printf("Enqueued: %d\n", value);
12    }
13 }
14 void dequeue() {
15     if (front > rear) {
16         printf("Queue empty!\n");
17     } else {
18         printf("Dequeued: %d\n", queue[front]);
19         front++;
20     }
21 }
22 void display() {
23     if (front > rear) {
24         printf("Queue empty!\n");
25     } else {
26         printf("Queue: ");
27         for (int i = front; i <= rear; i++) {
```

Output

Clear

1.Enqueue 2.Dequeue 3.Display 4.Exit
Choose: 10
Invalid choice!

1.Enqueue 2.Dequeue 3.Display 4.Exit
Choose: 1
Enter value: 10
Enqueued: 10

1.Enqueue 2.Dequeue 3.Display 4.Exit
Choose: 2
Dequeued: 10

1.Enqueue 2.Dequeue 3.Display 4.Exit
Choose: |

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Run

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```
26     printf("Queue: ");
27     for (int i = front; i <= rear; i++) {
28         printf("%d ", queue[i]);
29     }
30     printf("\n");
31 }
32 }
33 int main() {
34     int choice, value;
35     do {
36         printf("\n1.Enqueue 2.Dequeue 3.Display 4.Exit\nChoose: ");
37         scanf("%d", &choice);
38         if (choice == 1) {
39             printf("Enter value: ");
40             scanf("%d", &value);
41             enqueue(value);
42         } else if (choice == 2) {
43             dequeue();
44         } else if (choice == 3) {
45             display();
46         } else if (choice != 4) {
47             printf("Invalid choice!\n");
48         }
49     } while (choice != 4);
50     return 0;
51 }
```

Output

Clear

1.Enqueue 2.Dequeue 3.Display 4.Exit
Choose: 10
Invalid choice!

1.Enqueue 2.Dequeue 3.Display 4.Exit
Choose: 1
Enter value: 10
Enqueued: 10

1.Enqueue 2.Dequeue 3.Display 4.Exit
Choose: 2
Dequeued: 10

1.Enqueue 2.Dequeue 3.Display 4.Exit
Choose: |