```
#include <stdio.h>
#define MAX 5
int queue[MAX];
int front = -1, rear = -1;
void enqueue(int value) {
  if (rear == MAX - 1) {
     printf("\nQueue Overflow! Cannot insert %d\n", value);
  } else {
     if (front == -1) front = 0;
     queue[++rear] = value;
     printf("\n%d inserted into queue\n", value);
}
void dequeue() {
  if (front == -1 \parallel front > rear) {
     printf("\nQueue Underflow! Cannot delete\n");
  } else {
     printf("\n%d deleted from queue\n", queue[front]);
     front++;
  }
void display() {
  if (front == -1 \parallel front > rear) {
     printf("\nQueue is empty\n");
  } else {
     printf("\nQueue elements are: ");
     for (int i = front; i \le rear; i++) {
```

```
printf("%d ", queue[i]);
    printf("\n");
}
int main() {
  int choice, value;
  while (1) {
    printf("\n--- Queue Operations ---\n");
     printf("1. Enqueue\n2. Dequeue\n3. Display\n4. Exit\n");
     printf("Enter your choice: ");
     scanf("%d", &choice);
     switch (choice) {
       case 1:
         printf("Enter value to insert: ");
          scanf("%d", &value);
         enqueue(value);
         break;
       case 2:
         dequeue();
          break;
       case 3:
          display();
          break;
       case 4:
         return 0;
       default:
```

```
printf("\nInvalid choice! Try again.\n");
}
}
```

Output:

```
--- Queue Operations ---
1. Enqueue
2. Dequeue
Display
4. Exit
Enter your choice: 1
Enter value to insert: 20
20 inserted into queue
--- Queue Operations ---
1. Enqueue
2. Dequeue
Display
4. Exit
Enter your choice: 2
--- Queue Operations ---
1. Enqueue
2. Dequeue
3. Display
4. Exit
Enter your choice: 4
```