

```

SIZE = 5

queue = [None] * SIZE

front = -1

rear = -1

def enqueue(value):

    global rear, front

    if rear == SIZE - 1:

        print("Queue is FULL! Insertion is not possible!")

    else:

        if front == -1:

            front = 0

        rear += 1

        queue[rear] = value

        print(f"{value} enqueued to queue.")

def dequeue():

    global rear, front

    if front == -1 or front > rear:

        print("Queue is EMPTY! Cannot dequeue.")

    else:

        removed = queue[front]

        print(f"{removed} dequeued from queue.")

        front += 1

        if front > rear:

            front = rear = -1

def display():

    if front == -1 or front > rear:

```

```

        print("Queue is EMPTY!")

    else:

        print("Queue elements are:")

        for i in range(front, rear + 1):

            print(queue[i])

while True:

    print("\n--- Queue Operations Menu ---")

    print("1. Enqueue")

    print("2. Dequeue")

    print("3. Display")

    print("4. Exit")

    choice = input("Enter your choice (1-4): ")

    if choice == '1':

        value = input("Enter value to enqueue: ")

        enqueue(value)

    elif choice == '2':

        dequeue()

    elif choice == '3':

        display()

    elif choice == '4':

        print("Exiting program. Goodbye!")

        break

    else:

        print("Invalid choice. Please try again.")

```

---

--- Queue Operations Menu ---

1. Enqueue
2. Dequeue
3. Display
4. Exit

Enter your choice (1-4): 1  
Enter value to enqueue: 123  
123 enqueued to queue.

--- Queue Operations Menu ---

1. Enqueue
2. Dequeue
3. Display
4. Exit

Enter your choice (1-4): 1  
Enter value to enqueue: 345  
345 enqueued to queue.

--- Queue Operations Menu ---

1. Enqueue
2. Dequeue
3. Display
4. Exit

Enter your choice (1-4): 1  
Enter value to enqueue: 456  
456 enqueued to queue.

--- Queue Operations Menu ---

1. Enqueue
2. Dequeue
3. Display
4. Exit

Enter your choice (1-4): 2  
123 dequeued from queue.

--- Queue Operations Menu ---

1. Enqueue
2. Dequeue
3. Display
4. Exit

Enter your choice (1-4): 3  
Queue elements are:  
345  
456

--- Queue Operations Menu ---

1. Enqueue
2. Dequeue
3. Display
4. Exit

Enter your choice (1-4): 4  
Exiting program. Goodbye!