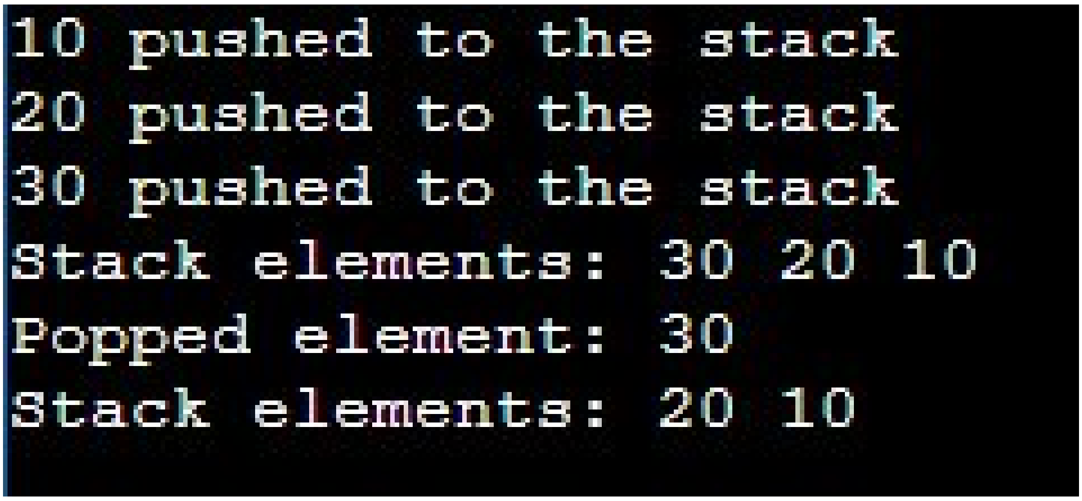
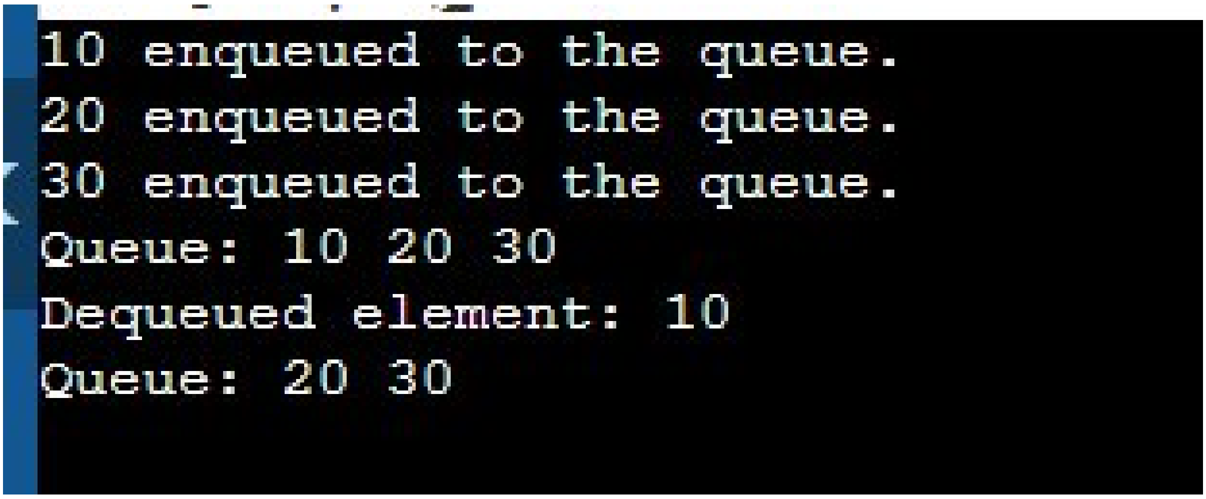
```
#include <stdio.h>
#include <stdlib.h>

struct Node {
    int data;
    struct Node* next;
};

struct Node* createNode(int data) {
    struct Node* newNode = (struct Node*)malloc(sizeof(struct Node));
    if (newNode == NULL) {
        printf("Memory allocation error\n");
        exit(EXIT_FAILURE);
    }
    newNode->data = data;
    newNode->next = NULL;
    return newNode;
}

void push(struct Node** stack, int data) {
    struct Node* newNode = createNode(data);
    newNode->next = *stack;
    *stack = newNode;
    printf("%d pushed to the stack\n", data);
}

int pop(struct Node** stack) {
    if (*stack == NULL) {
        printf("Stack is empty\n");
        exit(EXIT_FAILURE);
    }
    struct Node* temp = *stack;
    *stack = temp->next;
    int poppedValue = temp->data;
    free(temp);
    return poppedValue;
}

void display(struct Node* stack) {
    if (stack == NULL) {
        printf("Stack is empty\n");
        return;
    }
    printf("Stack elements: ");
    while (stack != NULL) {
        printf("%d ", stack->data);
        stack = stack->next;
    }
    printf("\n");
}

int main() {
    struct Node* stack = NULL;

    push(&stack, 10);
    push(&stack, 20);
    push(&stack, 30);

    display(stack);

    printf("Popped element: %d\n", pop(&stack));

    display(stack);

    return 0;
}
```



```
10 pushed to the stack
20 pushed to the stack
30 pushed to the stack
Stack elements: 30 20 10
Popped element: 30
Stack elements: 20 10
```

```
#include <stdio.h>
#include <stdlib.h>

struct Node {
    int data;
    struct Node* next;
};

struct Node* createNode(int data) {
    struct Node* newNode = (struct Node*)malloc(sizeof(struct Node));
    if (newNode == NULL) {
        printf("Memory allocation failed!\n");
        exit(EXIT_FAILURE);
    }
    newNode->data = data;
    newNode->next = NULL;
    return newNode;
}

struct Queue {
    struct Node *front, *rear;
};

void initializeQueue(struct Queue* queue) {
    queue->front = queue->rear = NULL;
}

int isEmpty(struct Queue* queue) {
    return (queue->front == NULL);
}

void enqueue(struct Queue* queue, int data) {
    struct Node* newNode = createNode(data);
    if (isEmpty(queue)) {
        queue->front = queue->rear = newNode;
    } else {
        queue->rear->next = newNode;
        queue->rear = newNode;
    }
    printf("%d enqueued to the queue.\n", data);
}

int dequeue(struct Queue* queue) {
    if (isEmpty(queue)) {
        printf("Queue is empty. Cannot dequeue.\n");
        exit(EXIT_FAILURE);
    }
    int data = queue->front->data;
    struct Node* temp = queue->front;
    queue->front = queue->front->next;
    free(temp);
    return data;
}

void displayQueue(struct Queue* queue) {
    if (isEmpty(queue)) {
        printf("Queue is empty.\n");
        return;
    }
    struct Node* current = queue->front;
    printf("Queue: ");
    while (current != NULL) {
        printf("%d ", current->data);
        current = current->next;
    }
    printf("\n");
}

int main() {
    struct Queue myQueue;
    initializeQueue(&myQueue);

    enqueue(&myQueue, 10);
    enqueue(&myQueue, 20);
    enqueue(&myQueue, 30);

    displayQueue(&myQueue);

    printf("Dequeued element: %d\n", dequeue(&myQueue));

    displayQueue(&myQueue);

    return 0;
}
```



```
10 enqueued to the queue.
20 enqueued to the queue.
30 enqueued to the queue.
Queue: 10 20 30
Dequeued element: 10
Queue: 20 30
```