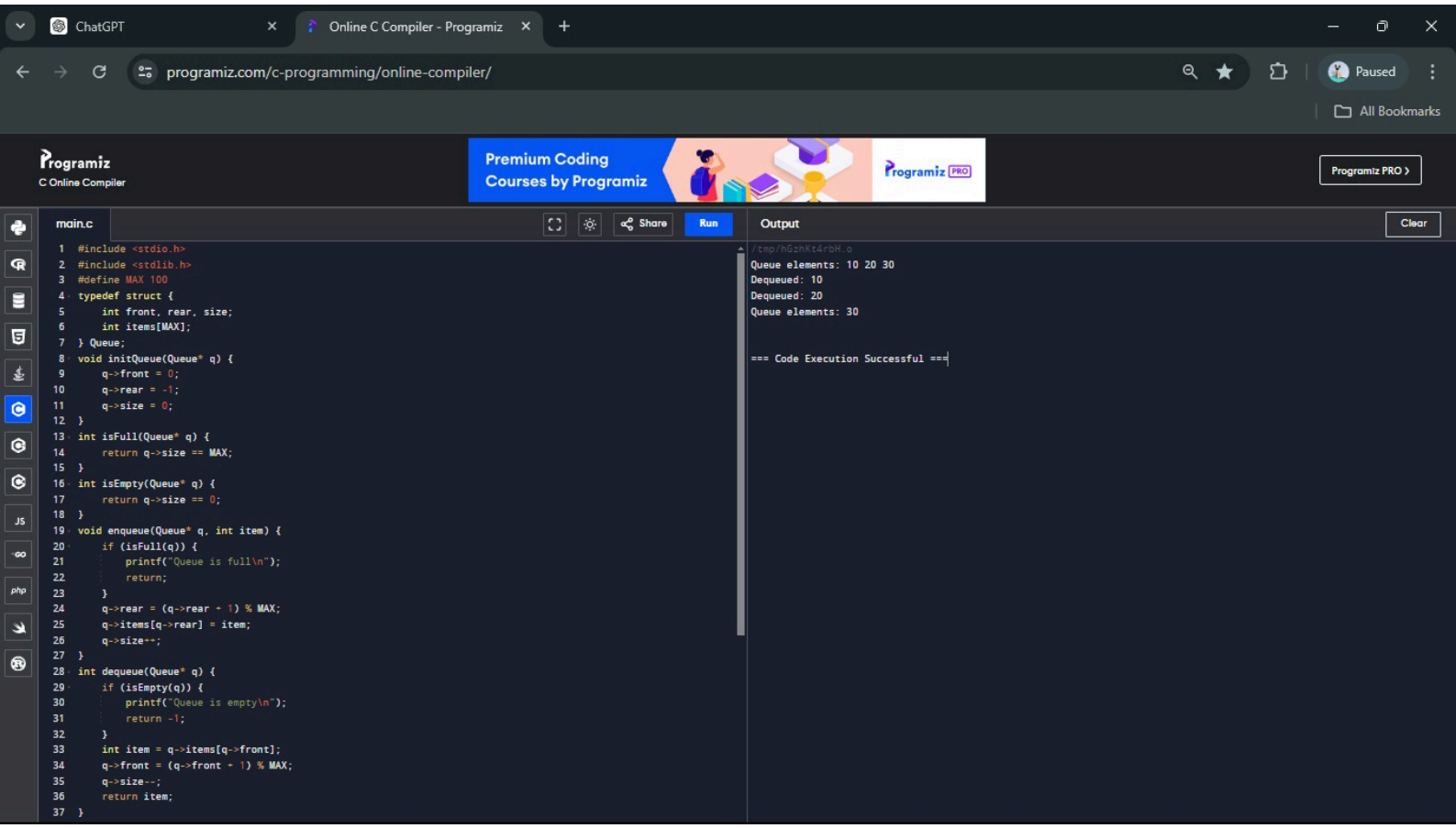
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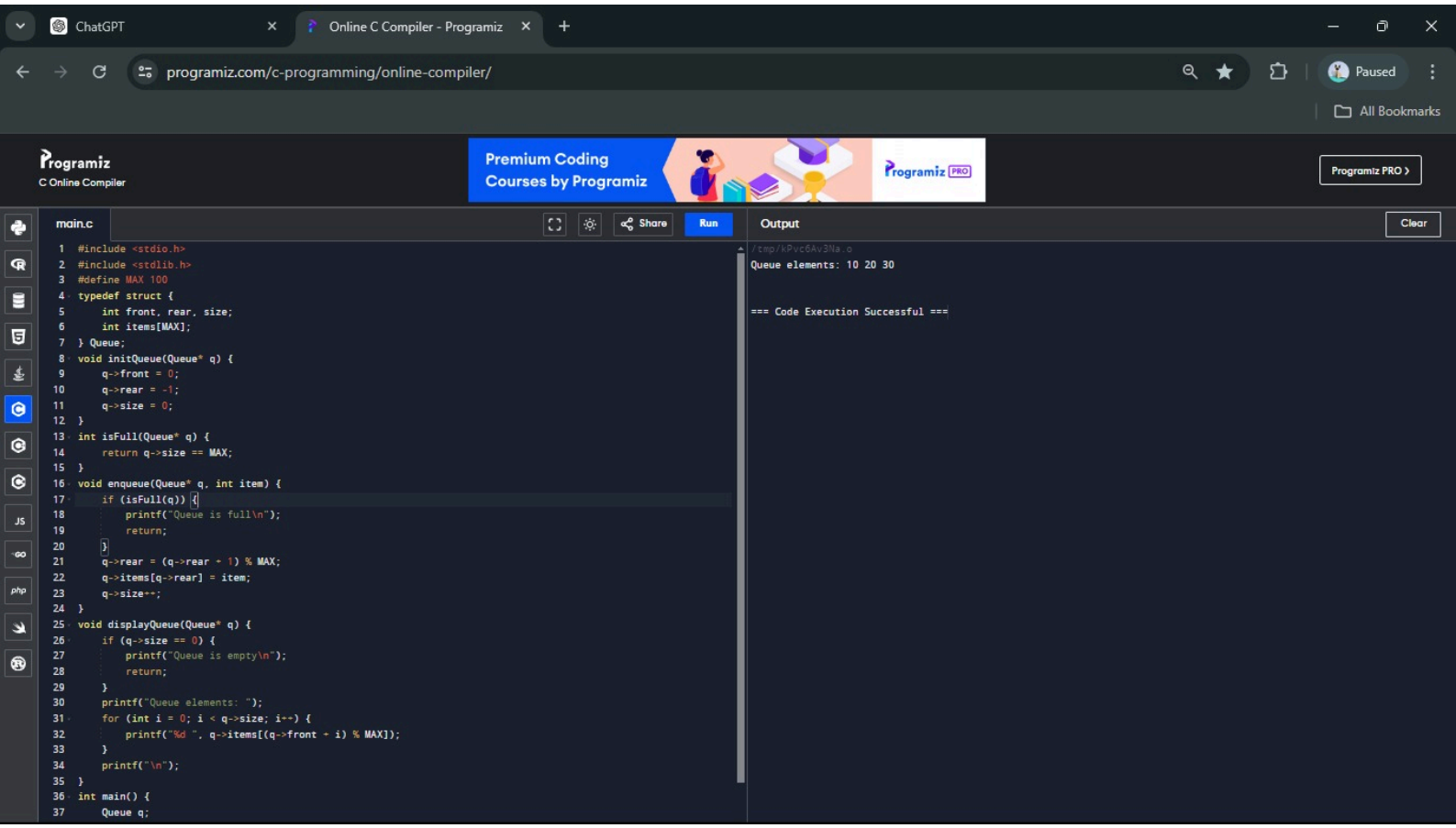
main.c
Share
Run
Output
Clear
#include <stdio.h>
#include <stdlib.h>
#define MAX 100
typedef struct {
int front, rear, size;
int items[MAX];
} Queue;
void initQueue(Queue* q) {
q->front = 0;
q->rear = -1;
q->size = 0;
}
int isFull(Queue* q) {
return q->size == MAX;
}
int isEmpty(Queue* q) {
return q->size == 0;
}
void enqueue(Queue* q, int item) {
if (isFull(q)) {
printf("Queue is full\n");
return;
}
q->rear = (q->rear + 1) % MAX;
q->items[q->rear] = item;
q->size++;
}
int dequeue(Queue* q) {
if (isEmpty(q)) {
printf("Queue is empty\n");
return -1;
}
int item = q->items[q->front];
q->front = (q->front + 1) % MAX;
q->size--;
return item;
}
/tmp/hGzhKt4rbH.o
Queue elements: 10 20 30
Dequeued: 10
Dequeued: 20
Queue elements: 30
=== Code Execution Successful ===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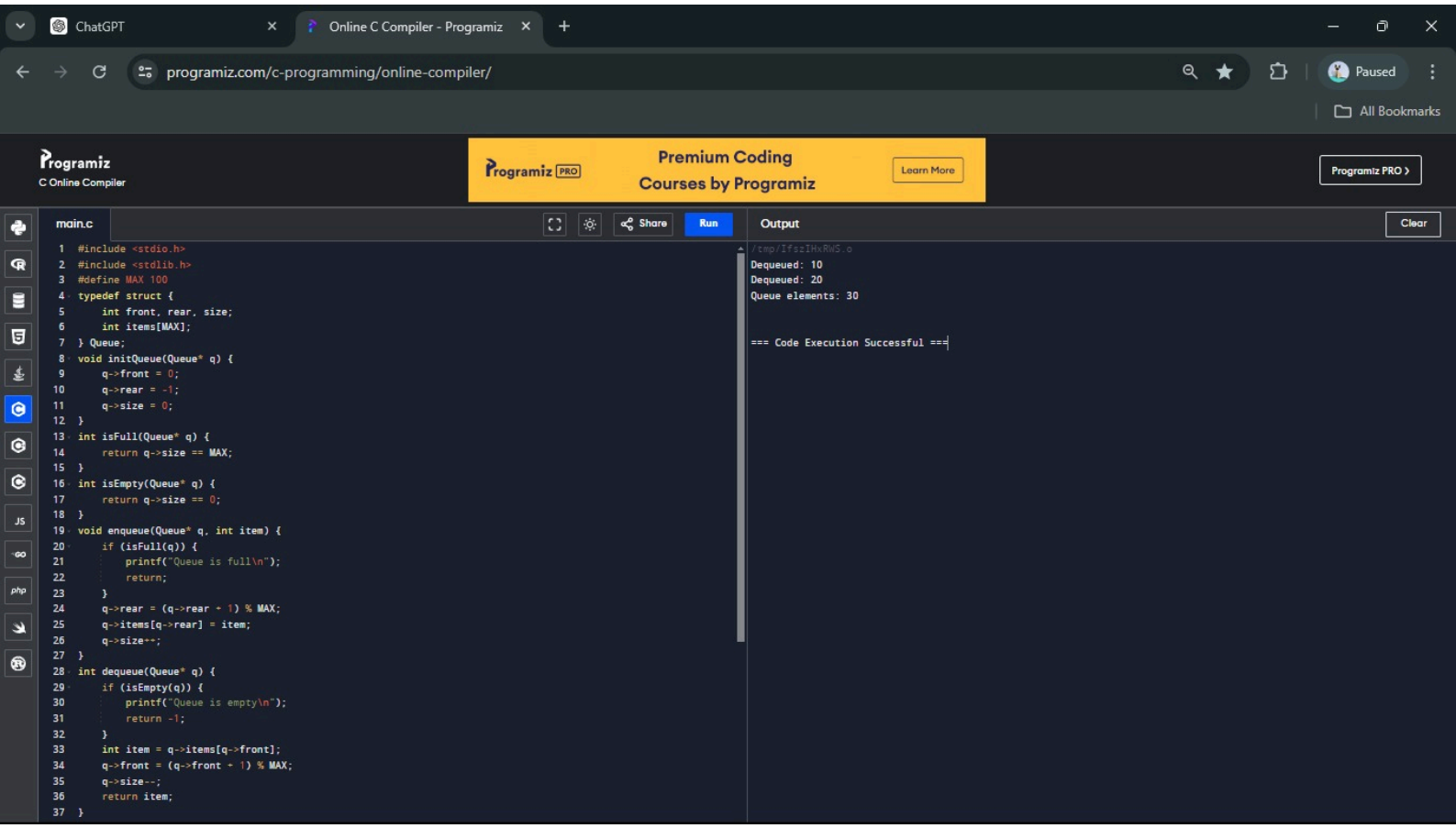
return;
}
q->rear = (q->rear + 1) % MAX;
q->items[q->rear] = item;
q->size++;
}
void displayQueue(Queue* q) {
if (q->size == 0) {
printf("Queue is empty\n");
return;
}
printf("Queue elements: ");
for (int i = 0; i < q->size; i++) {
printf("%d ", q->items[(q->front + i) % MAX]);
}
printf("\n");
}
int main() {
Queue q;
/tmp/kPvcGAv3Na.o
Queue elements: 10 20 30
=== Code Execution Successful ===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return -1;
}
int item = q->items[q->front];
q->front = (q->front + 1) % MAX;
q->size--;
return item;
}
/tmp/IfszIHxRWS.o
Dequeued: 10
Dequeued: 20
Queue elements: 30
=== Code Execution Successful ===