**13. Write a C program to implement Queue operations such as ENQUEUE, DEQUEUE and Display**

#include <stdio.h>

#define MAX 100

int queue[MAX], front = -1, rear = -1;

void enqueue(int x) {

if (rear == MAX - 1) {

printf("Queue Overflow\n");

return;

}

if (front == -1) front = 0;

queue[++rear] = x;

}

void dequeue() {

if (front == -1 || front > rear) {

printf("Queue Underflow\n");

return;

}

printf("Dequeued: %d\n", queue[front++]);

}

void display() {

int i;

if (front == -1 || front > rear) {

printf("Queue is Empty\n");

return;

}

printf("Queue elements: ");

for (i = front; i <= rear; i++) {

printf("%d ", queue[i]);

}

printf("\n");

}

int main() {

int choice, val;

while (1) {

printf("\n1. ENQUEUE\n2. DEQUEUE\n3. DISPLAY\n4. EXIT\nEnter choice: ");

scanf("%d", &choice);

switch (choice) {

case 1:

printf("Enter value to enqueue: ");

scanf("%d", &val);

enqueue(val);

break;

case 2:

dequeue();

break;

case 3:

display();

break;

case 4:

return 0;

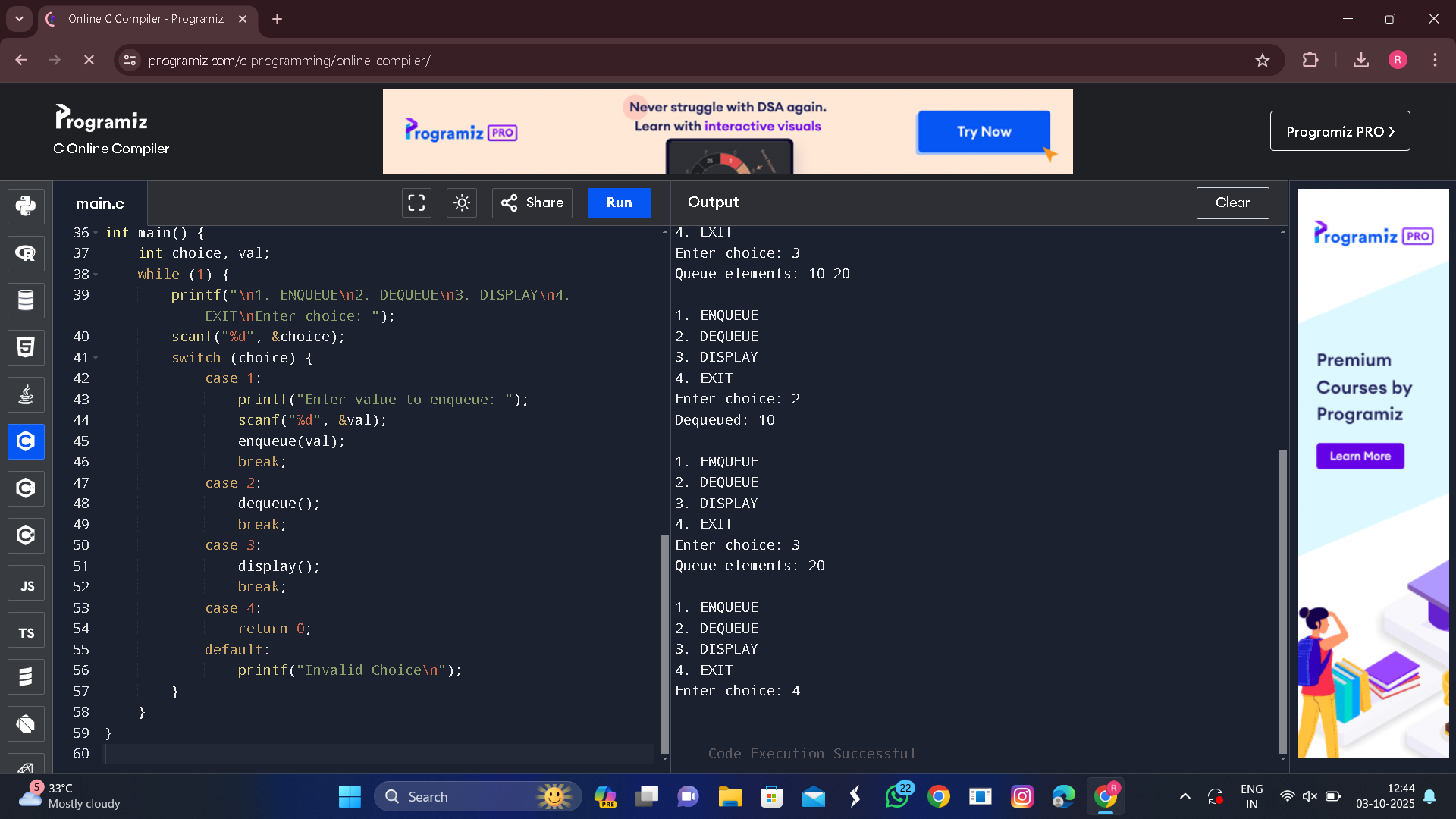
default:

printf("Invalid Choice\n");

}

}

}

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