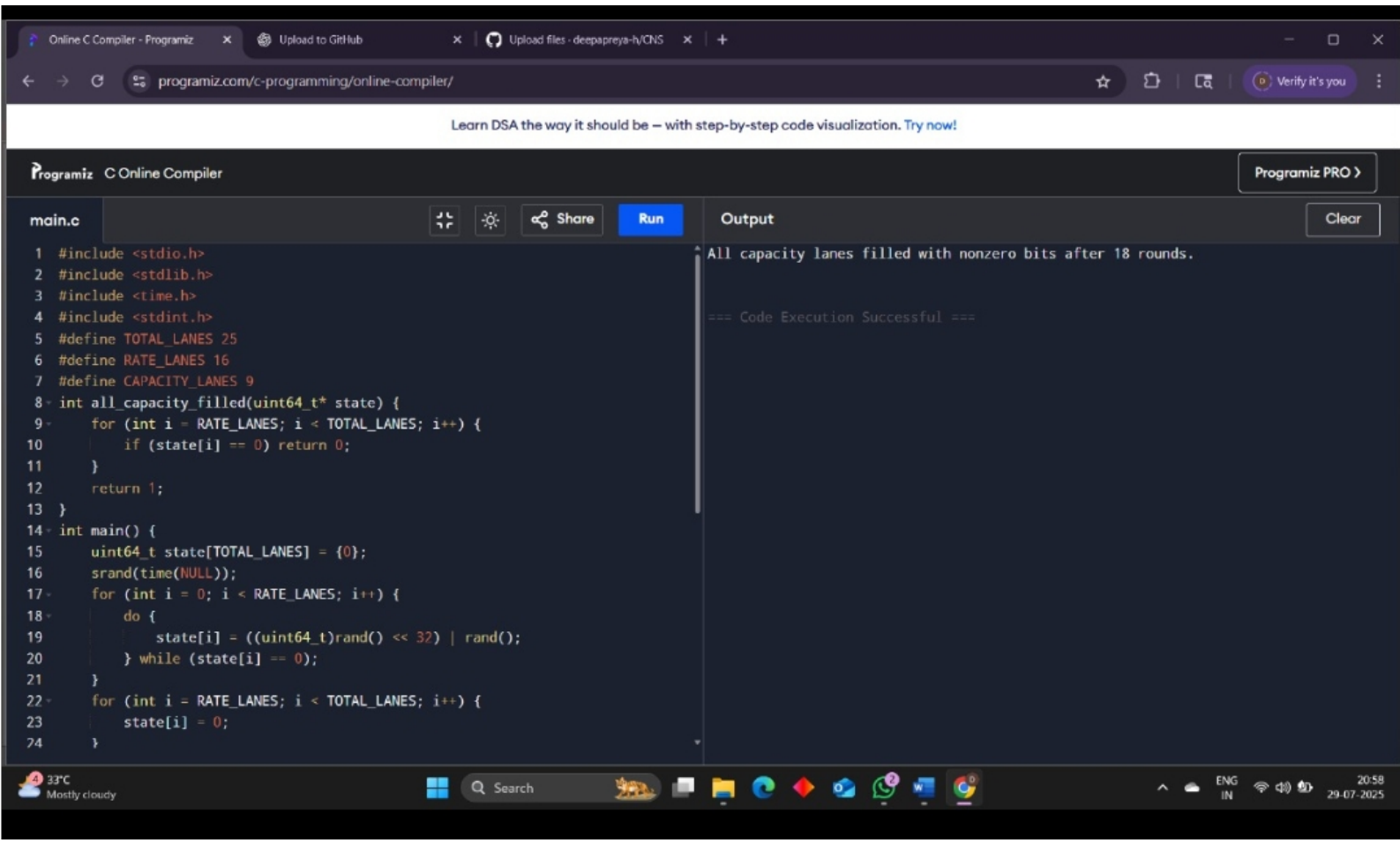
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#include <stdio.h>
#include <stdlib.h>
#include <time.h>
#include <stdint.h>
#define TOTAL_LANES 25
#define RATE_LANES 16
#define CAPACITY_LANES 9
int all_capacity_filled(uint64_t* state) {
for (int i = RATE_LANES; i < TOTAL_LANES; i++) {
if (state[i] == 0) return 0;
}
return 1;
}
int main() {
uint64_t state[TOTAL_LANES] = {0};
srand(time(NULL));
for (int i = 0; i < RATE_LANES; i++) {
do {
state[i] = ((uint64_t)rand() << 32) | rand();
} while (state[i] == 0);
}
for (int i = RATE_LANES; i < TOTAL_LANES; i++) {
state[i] = 0;
}
All capacity lanes filled with nonzero bits after 18 rounds.
=== Code Execution Successful ===
33°C
Mostly cloudy
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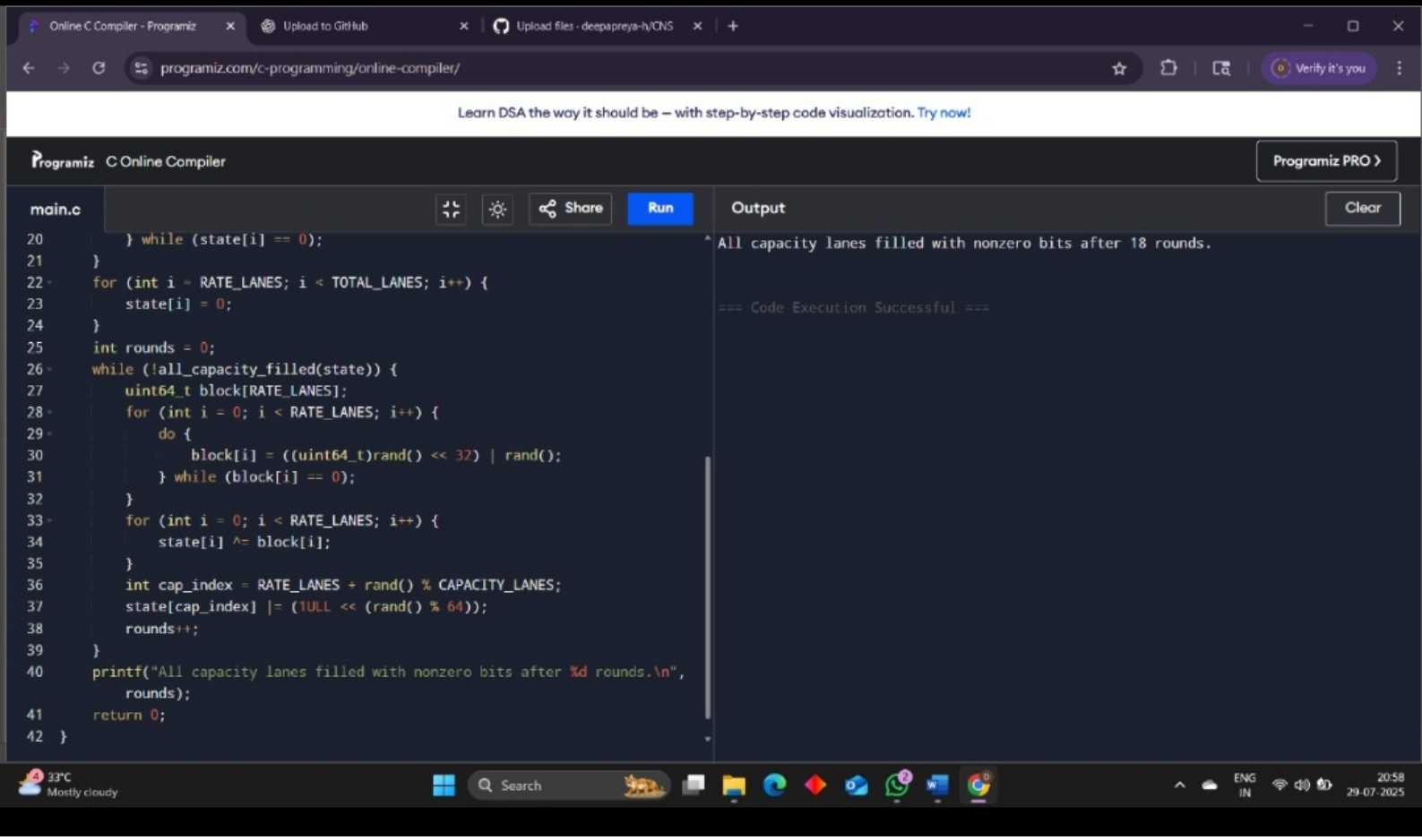
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} while (state[i] == 0);
}
for (int i = RATE_LANES; i < TOTAL_LANES; i++) {
state[i] = 0;
}
int rounds = 0;
while (!all_capacity_filled(state)) {
uint64_t block[RATE_LANES];
for (int i = 0; i < RATE_LANES; i++) {
do {
block[i] = ((uint64_t)rand() << 32) | rand();
} while (block[i] == 0);
}
for (int i = 0; i < RATE_LANES; i++) {
state[i] ^= block[i];
}
int cap_index = RATE_LANES + rand() % CAPACITY_LANES;
state[cap_index] |= (1ULL << (rand() % 64));
rounds++;
}
printf("All capacity lanes filled with nonzero bits after %d rounds.\n",
rounds);
return 0;
}
All capacity lanes filled with nonzero bits after 18 rounds.
=== Code Execution Successful ===
33°C
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