8.Write a C program to simulate a Non-Deterministic Finite Automata (NFA) for the given language representing strings that start with b and end with a

#include <stdio.h>

#include <stdlib.h>

#include <string.h>

#define MAX\_STRING\_LEN 100

int simulateNFA(char\* input) {

int state = 0;

int len = strlen(input);

for (int i = 0; i < len; i++) {

char c = input[i];

if (state == 0) {

if (c == 'b') {

state = 1;

} else {

return 0;

}

} else {

if (c == 'a' && i == len - 1) {

return 1;

}

}

}

return 0;

}

int main() {

char input[MAX\_STRING\_LEN];

printf("Enter a string: ");

scanf("%s", input);

if (simulateNFA(input)) {

printf("Accepted\n");

} else {

printf("Rejected\n");

}

return 0;

}

