EXP NO 8

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

#include <stdio.h>

#include <stdbool.h>

bool transition(int state, char symbol) {

switch (state) {

case 0:

return symbol == 'b' ? true : false;

case 1:

return true;

case 2:

return symbol == 'a' ? true : false;

default:

return false;

}

}

bool simulateNFA(const char \*input) {

int currentState = 0;

for (int i = 0; input[i] != '\0'; i++) {

if (transition(currentState, input[i])) {

currentState++;

} else {

return false;

}

}

return currentState == 3;

}

int main() {

char input[100];

printf("Enter a string: ");

scanf("%s", input);

if (simulateNFA(input)) {

printf("String accepted.\n");

} else {

printf("String not accepted.\n");

}

return 0;

}

OUTPUT :

