#include <stdio.h>

int main() {

int state = 0;

char inputString[50];

printf("Enter the input string: ");

scanf("%s", inputString);

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

if (state == 0 && inputString[i] == '0') {

state = 1;

} else if (state == 1 && inputString[i] == '0') {

state = 1;

} else if (state == 1 && inputString[i] == '1') {

state = 2;

} else {

state = -1;

break;

}

}

if (state == 2) {

printf("Accepted: String follows the pattern 'starts with 0 and ends with 1'\n");

} else {

printf("Rejected: String does not follow the pattern\n");

}

return 0;

}