#include <stdio.h>

#include <string.h>

#define MAX\_LEN 100

void find\_repeated\_non\_repeated(char \*str, char \*repeated, char \*non\_repeated) {

int freq[256] = {0};

char \*ptr = str;

\*repeated = '\0';

\*non\_repeated = '\0';

while (\*ptr != '\0') {

freq[\*ptr]++;

ptr++;

}

ptr = str;

while (\*ptr != '\0') {

if (freq[\*ptr] > 1) {

\*repeated = \*ptr;

break;

}

ptr++;

}

ptr = str;

while (\*ptr != '\0') {

if (freq[\*ptr] == 1) {

\*non\_repeated = \*ptr;

break;

}

ptr++;

}

}

int main() {

char str[MAX\_LEN];

int len, i, freq[256] = {0};

char repeated, non\_repeated;

printf("Enter a string: ");

scanf("%s", str);

// Calculate string length and frequency of each character

len = strlen(str);

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

freq[str[i]]++;

}

// Print length of string and word frequency

printf("Length of the string is: %d\n", len);

printf("Word frequency is: %d\n", freq[str[0]]);

// Find first repeated and non-repeated characters using pointers

find\_repeated\_non\_repeated(str, &repeated, &non\_repeated);

// Print first repeated and non-repeated characters

if (repeated == '\0') {

printf("No repeated characters found in the string.\n");

} else {

printf("First repeated character is: %c\n", repeated);

}

if (non\_repeated == '\0') {

printf("No non-repeated characters found in the string.\n");

} else {

printf("First non-repeated character is: %c\n", non\_repeated);

}

return 0;

}