

## ACT 3 - Estructura de datos - String

```
1 > #include <iostream>
2 > #include <algorithm>
3 > using namespace std;
4
5 > int main() {
6 >     string cadena;
7 >     char vocales[] = {'a', 'e', 'i', 'o'};|
8 >     int space_count;
9 >     int sizevocales = sizeof(vocales) / sizeof(vocales[0]);
10 >    //string cadena = {"Lorem Ipsum is simply dummy text of the printing and typesetting industry."};
11 >    cout << "ingresa tu palabra" << endl;
12 >    getline( [&] cin, [&] cadena);
13 >    string cadena0g =& cadena;
14 >    space_count = count( first: cadena.begin(), last: cadena.end(), value: ' ') //hola mundo
15 >    int a_count = count( first: cadena.begin(), last: cadena.end(), value: 'a');
16 >    int e_count = count( first: cadena.begin(), last: cadena.end(), value: 'e');
17 >    int i_count = count( first: cadena.begin(), last: cadena.end(), value: 'i');
18 >    int o_count = count( first: cadena.begin(), last: cadena.end(), value: 'o');
19 >    int u_count = count( first: cadena.begin(), last: cadena.end(), value: 'u');
20 >    int vocals_count = a_count + e_count + i_count + o_count + u_count;
21
22 //if (cadena == cadena.reserve()) {
23
24 //}
25 reverse( first: cadena.begin(), last: cadena.end());
26 if (cadena == cadena0g) {
```

```
    cout << "tu palabra es palindroma" << endl;
} else {
    cout << "tu palabra NO es palindroma" << endl;
}

cout << "Tu numero de vocales es: " << vocals_count << endl;
cout << "cantidad de A: " << a_count << endl;
cout << "cantidad de E: " << e_count << endl;
cout << "cantidad de I: " << i_count << endl;
cout << "cantidad de O: " << o_count << endl;
cout << "cantidad de U: " << u_count << endl;
cout << "Tu numero de palabras es: " <<(space_count + 1) << endl;
cout << cadena << endl;
cout << endl;

}
```

```
ingresa tu palabra
Me gustan los videojuegos
tu palabra NO es palindroma
Tu numero de vocales es: 10
cantidad de A: 1
cantidad de E: 3
cantidad de I: 1
cantidad de O: 3
cantidad de U: 2
Tu numero de palabras es: 4
```

```
/home/mass/programacion/estruc/act3
ingresa tu palabra
oso
tu palabra es palindroma
Tu numero de vocales es: 2
cantidad de A: 0
cantidad de E: 0
cantidad de I: 0
cantidad de O: 2
cantidad de U: 0
Tu numero de palabras es: 1
```

### Codigo:

```
#include <iostream>
#include <algorithm>
using namespace std;

int main() {
    string cadena;
    char vocales[] = {'a', 'e', 'i', 'o'};
    int space_count;
    int sizevocales = sizeof(vocales) / sizeof(vocales[0]);
    //string cadena = ("Lorem Ipsum is simply dummy text of the printing and typesetting industry.");
    cout << "ingresa tu palabra" << endl;
    getline(cin,cadena);
    string cadenaOg = cadena;
    space_count = count(cadena.begin(), cadena.end(), ' ');
    int a_count = count(cadena.begin(), cadena.end(), 'a');
    int e_count = count(cadena.begin(), cadena.end(), 'e');
    int i_count = count(cadena.begin(), cadena.end(), 'i');
    int o_count = count(cadena.begin(), cadena.end(), 'o');
    int u_count = count(cadena.begin(), cadena.end(), 'u');
    int vocals_count = a_count + e_count + i_count + o_count + u_count;

    //if (cadena == cadena.reserve()) {

    //}
    reverse(cadena.begin(), cadena.end());
    if (cadena == cadenaOg) {
        cout << "tu palabra es palindroma" << endl;
    } else {
        cout << "tu palabra NO es palindroma" << endl;
    }

    cout << "Tu numero de vocales es: " << vocals_count << endl;
    cout << "cantidad de A: " << a_count << endl;
    cout << "cantidad de E: " << e_count << endl;
    cout << "cantidad de I: " << i_count << endl;
    cout << "cantidad de O: " << o_count << endl;
    cout << "cantidad de U: " << u_count << endl;
    cout << "Tu numero de palabras es: " << (space_count + 1) << endl;
    cout << endl;
}
```