Silencios

silencios

```
_{\rm 1} vector<intervalo > silencios(senial s, int prof, int freq, int umbral) {
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1
                                     vector < pair < int , int > > intervalos;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         c_1
                                     int i=0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         c_2
    4
                                     while(i < (s.size() - 1)){</pre>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         c_3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 + n - 1
                                                            if(abs(s[i]) < umbral ){</pre>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     n-1
                                                                                    int j = i + 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     n-1
    6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         c_5
                                                                                     \label{eq:while} \begin{tabular}{ll} \begin{
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1+n-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         c_6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     n-1
                                                                                                            j++;
                                                                                    if(j > (i + 1)){
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     n-1
10
11
                                                                                                             intervalos.push_back(make_pair(i,(j - 1)));
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     n-1
12
                                                                                     i = j + 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     n-1
13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        c_{10}
                                                              }
14
                                                              else{
15
                                                                                    i++;
16
17
                                     }
18
19
                                     return intervalos;
20 }
```

- n = |s|
- $T_{silencios}(n) = c_1 + c_2 + c_3 \cdot n + c_4 \cdot (n-1) + c_5 \cdot (n-1) + c_6 \cdot n + c_7 \cdot (n-1) + c_8 \cdot (n-1) + c_9 \cdot (n-1) + c_9$
- \blacksquare $T_{silencios}(n) \in O(n)$