Silencios

silencios

```
_{\rm 1} vector<intervalo > silencios(senial s, int prof, int freq, int umbral) {
                                     vector < pair < int , int > > intervalos;
                                     int i=0;
    4
                                     while(i < (s.size() - 1)){</pre>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1
                                                           if(abs(s[i]) < umbral ){</pre>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      c_1
                                                                                    int j = i + 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1
    6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      c_2
                                                                                     \label{eq:while} \begin{tabular}{ll} \begin{
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 + (n-1)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      c_3
                                                                                                           j++;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (n-1)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      c_4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (n-1)
                                                                                    if(j > (i + 1)){
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      c_5
10
11
                                                                                                            intervalos.push_back(make_pair(i,(j - 1)));
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 + (n-1)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      c_6
12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (n-1)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      c_7
                                                                                     i = j + 1;
13
                                                             }
14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (n-1)
                                                             else{
15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      c_8
                                                                                     i++;
16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     c_9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (n-1)
17
                                     }
18
19
                                     return intervalos;
20 }
```

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