

```
1: // Angel Zheondre Calcano
2: // PS4
3:
4: #ifndef _a
5: #define _a
6:
7: #include <string>
8: #include <iostream>
9:
10: using namespace std;
11:
12: class Edist{
13:
14:     string a, b ;
15:     int maxCL, maxRL ;
16:     int** opt ;
17:
18: public :
19:
20:     Edist( string x, string y ): a(x), b(y) {
21:         int i, j ;
22:         maxCL = a.size() + 1 ;
23:         maxRL = b.size() + 1 ;
24:
25:         opt = new int*[maxRL] ;
26:
27:         for( i = 0 ; i < maxRL ; i++ )
28:             opt[i] = new int[maxCL] ;
29:
30:         for( i = 0 ; i < maxRL ; i++ )
31:             for( j = 0 ; j < maxCL ; j++ )
32:                 opt[i][j] = -1 ;
33:     } ;
34:
35:     ~Edist(){
36:         delete opt ;
37:     }
38:     int penalty( char a, char b) ;
39:     int min( int x, int y, int z ) ;
40:     int OptDistance() ;
41:     int Alignment(int x, int y) ;
42:     // make sure to delete 2d array in deconstructor..
43: } ;
44:
45: #endif
```