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1  //Mahmoud Elsayd Eldwakhly
2
3  //21P0017
4
5  // LAP ASSIGNMENT 6
6
7
8  #include <iostream>
9  #include <cstring>
10 #include <cmath>
11 using namespace std;
12
13 // 1-
14
15 void mystrcpy (char z [] , char s [])
16 {
17     for ( int i = 0 ; i<strlen(s)+1 ; i ++ )
18     {
19         z[i] = s [i] ;
20     }
21 }
22
23
24 // 2-
25
26 int mystrlen(char s [])
27 {
28     int i = 0 ;
29     while (s[i] != '\0')
30         i++ ;
31     return i ;
32 }
33
34 // 3-
35
36 int mystrcmp (char s1[] , char s2 [] )
37 {
38     int z = (strlen(s1)> strlen(s2)) ? strlen(s1) : strlen(s2) ;
39     for (int i = 0 ; i < z ; i ++ )
40     {
41         if (s1[i] < s2 [i] ) return -1 ;
42         else if (s1[i] > s2 [i] ) return 1 ;
43     }
44     return 0 ;
45 }
46
47 // 4-
48
49 int myatoi (char s [])
50 {
51     int result =0 ;
52
53
54     for (int i = 0 ; i < strlen (s) ; i++)
55     {
56         result = result * 10 + (s[i]-'0') ;
57     }
58     return result ;
59 }
60
61
62 // 5-
63
64 float myatof (char m [])
65 {
66     int dotindex = -1 ;
67     for ( int i = 0 ; i < strlen(m) ; i ++ )
68     {
69         if ( m[i]== '.' )
70         {
71             dotindex = i ;
72             break ;
73         }
74     }
75     if (dotindex == -1 )
76         return atoi(m) ;
77     float integerpart = 0 ;
78     for (int i = 0 ; i<dotindex ; i ++ )

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79     {
80         integerpart = integerpart * 10 + (m[i] - '0') ;
81     }
82     float floatpart = 0 ;
83     for (int i = dotindex + 1 ; i<strlen(m) ; i ++ )
84     {
85         floatpart += (m[i]- '0')* pow(10 , dotindex -i) ;
86     }
87     return integerpart + floatpart ;
88 }
89
90
91
92
93 int main()
94 {
95     char z [50] ;
96     char m [20] = {'m','a','h','m','o','u','d'} ;
97     mystrcopy (z,m) ;
98     cout << z << endl ;
99     cout << strlen(z) << endl ;
100    cout << strcmp ("abcd" , "abcd") << endl ;
101    cout << strcmp ("abce" , "abcd") << endl ;
102    cout << strcmp ("abcd" , "abce") << endl ;
103    cout << atoi ( "12345") << endl ;
104    cout << atof ("123.45") << endl ;
105
106
107    return 0;
108 }
109

```