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1  #include <stdio.h>
2  int main(void)
3  {
4      //variable declaraions
5      int iArray[] = { 9, 30, 6, 12, 98, 95, 20, 23, 2, 45 };
6      int int_size;
7      int iArray_size;
8      int iArray_num_elements;
9
10     float fArray[] = { 1.2f, 2.3f, 3.4f, 4.5f, 5.6f, 6.7f, 7.8f, 8.9f };
11     int float_size;
12     int fArray_size;
13     int fArray_num_elements;
14
15     char cArray[] = { 'A', 'S', 'T', 'R', 'O', 'M', 'E', 'D', 'I', 'C', 'O', 'M', 'P' };
16     int char_size;
17     int cArray_size;
18     int cArray_num_elements;
19
20     //code
21
22     // ***** iArray[] *****
23     printf("\n\n");
24     printf("In-line Initialization And Piece-meal Display Of Elements of Array
25         'iArray[]': \n\n");
26     printf("iArray[0] (1st Element) = %d\n", iArray[0]);
27     printf("iArray[1] (2nd Element) = %d\n", iArray[1]);
28     printf("iArray[2] (3rd Element) = %d\n", iArray[2]);
29     printf("iArray[3] (4th Element) = %d\n", iArray[3]);
30     printf("iArray[4] (5th Element) = %d\n", iArray[4]);
31     printf("iArray[5] (6th Element) = %d\n", iArray[5]);
32     printf("iArray[6] (7th Element) = %d\n", iArray[6]);
33     printf("iArray[7] (8th Element) = %d\n", iArray[7]);
34     printf("iArray[8] (9th Element) = %d\n", iArray[8]);
35     printf("iArray[9] (10th Element) = %d\n\n", iArray[9]);
36
37     int_size = sizeof(int);
38     iArray_size = sizeof(iArray);
39     iArray_num_elements = iArray_size / int_size;
40     printf("Size Of Data type 'int' = %d bytes\n",
41         int_size);
42     printf("Number Of Elements In 'int' Array 'iArray[]' = %d Elements\n",
43         iArray_num_elements);
44     printf("Size Of Array 'iArray[]' (%d Elements * %d Bytes) = %d Bytes\n\n",
45         iArray_num_elements, int_size, iArray_size);
46
47     // ***** fArray[] *****
48     printf("\n\n");
49     printf("In-line Initialization And Piece-meal Display Of Elements of Array
50         'fArray[]': \n\n");
51     printf("fArray[0] (1st Element) = %f\n", fArray[0]);

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47     printf("fArray[1] (2nd Element) = %f\n", fArray[1]);
48     printf("fArray[2] (3rd Element) = %f\n", fArray[2]);
49     printf("fArray[3] (4th Element) = %f\n", fArray[3]);
50     printf("fArray[4] (5th Element) = %f\n", fArray[4]);
51     printf("fArray[5] (6th Element) = %f\n", fArray[5]);
52     printf("fArray[6] (7th Element) = %f\n", fArray[6]);
53     printf("fArray[7] (8th Element) = %f\n", fArray[7]);
54     printf("fArray[8] (9th Element) = %f\n", fArray[8]);
55     printf("fArray[9] (10th Element) = %f\n\n", fArray[9]);
56
57     float_size = sizeof(float);
58     fArray_size = sizeof(fArray);
59     fArray_num_elements = fArray_size / float_size;
60     printf("Size Of Data type 'float'           = %d bytes\n",      ↗
        float_size);
61     printf("Number Of Elements In 'float' Array 'fArray[]'       = %d Elements\n", ↗
        fArray_num_elements);
62     printf("Size Of Array 'fArray[]' (%d Elements * %d Bytes)    = %d Bytes\n\n", ↗
        fArray_num_elements, float_size, fArray_size);
63
64     // ***** cArray[] *****
65     printf("\n\n");
66     printf("In-line Initialization And Piece-meal Display Of Elements of Array ↗
        'cArray[]': \n\n");
67     printf("cArray[0] (1st Element) = %c\n", cArray[0]);
68     printf("cArray[1] (2nd Element) = %c\n", cArray[1]);
69     printf("cArray[2] (3rd Element) = %c\n", cArray[2]);
70     printf("cArray[3] (4th Element) = %c\n", cArray[3]);
71     printf("cArray[4] (5th Element) = %c\n", cArray[4]);
72     printf("cArray[5] (6th Element) = %c\n", cArray[5]);
73     printf("cArray[6] (7th Element) = %c\n", cArray[6]);
74     printf("cArray[7] (8th Element) = %c\n", cArray[7]);
75     printf("cArray[8] (9th Element) = %c\n", cArray[8]);
76     printf("cArray[9] (10th Element) = %c\n", cArray[9]);
77     printf("cArray[10] (11th Element) = %c\n", cArray[10]);
78     printf("cArray[11] (12th Element) = %c\n", cArray[11]);
79     printf("cArray[12] (13th Element) = %c\n\n", cArray[12]);
80
81     char_size = sizeof(char);
82     cArray_size = sizeof(cArray);
83     cArray_num_elements = cArray_size / char_size;
84     printf("Size Of Data type 'char'           = %d bytes\n",      ↗
        char_size);
85     printf("Number Of Elements In 'char' Array 'cArray[]'       = %d Elements\n", ↗
        cArray_num_elements);
86     printf("Size Of Array 'cArray[]' (%d Elements * %d Bytes)    = %d Bytes\n\n", ↗
        cArray_num_elements, char_size, cArray_size);
87
88     return(0);
89 }
90
91

```