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1  #include <stdio.h>
2
3  int main(void)
4  {
5      //variable declarations
6      int iArray[] = { 10, 20, 30, 40, 50, 60, 70, 80, 90, 100 }; //Integer Array
7      int *ptr_iArray = NULL; //Integer Pointer
8
9      //code
10
11     // ##### USING ARRAY NAME AS A POINTER i.e : Value Of xth Element Of
        iArray : *(iArray + x) AND Address Of xth Element Of iArray : (iArray + x)
        #####
12     printf("\n\n");
13     printf("*** USING ARRAY NAME AS A POINTER i.e : Value Of xth Element Of
        iArray : *(iArray + x) AND Address Of xth Element Of iArray : (iArray + x)
        ***\n\n");
14     printf("Integer Array Elements And Their Addresses : \n\n");
15     printf("(*(iArray + 0) = %d \t At Address (iArray + 0) : %p\n", *(iArray + 0),
        (iArray + 0));
16     printf("(*(iArray + 1) = %d \t At Address (iArray + 1) : %p\n", *(iArray + 1),
        (iArray + 1));
17     printf("(*(iArray + 2) = %d \t At Address (iArray + 2) : %p\n", *(iArray + 2),
        (iArray + 2));
18     printf("(*(iArray + 3) = %d \t At Address (iArray + 3) : %p\n", *(iArray + 3),
        (iArray + 3));
19     printf("(*(iArray + 4) = %d \t At Address (iArray + 4) : %p\n", *(iArray + 4),
        (iArray + 4));
20     printf("(*(iArray + 5) = %d \t At Address (iArray + 5) : %p\n", *(iArray + 5),
        (iArray + 5));
21     printf("(*(iArray + 6) = %d \t At Address (iArray + 6) : %p\n", *(iArray + 6),
        (iArray + 6));
22     printf("(*(iArray + 7) = %d \t At Address (iArray + 7) : %p\n", *(iArray + 7),
        (iArray + 7));
23     printf("(*(iArray + 8) = %d \t At Address (iArray + 8) : %p\n", *(iArray + 8),
        (iArray + 8));
24     printf("(*(iArray + 9) = %d \t At Address (iArray + 9) : %p\n", *(iArray + 9),
        (iArray + 9));
25
26     // ASSIGNING BASE ADDRESS OF INTEGER ARRAY 'iArray' TO INTEGER POINTER
        'ptr_iArray'
27     // NAME OF ANY ARRAY IS ITS OWN BASE ADDRESS
28     ptr_iArray = iArray; //SAME AS ... ptr_iArray = &iArray[0]
29
30     // ##### USING POINTER AS ARRAY NAME i.e : Value Of xth Element Of iArray :
        ptr_iArray[x] AND Address Of xth Element Of iArray : &ptr_iArray[x] #####
31     printf("\n\n");
32     printf("*** USING POINTER AS ARRAY NAME i.e : Value Of xth Element Of iArray :
        ptr_iArray[x] AND Address Of xth Element Of iArray : &ptr_iArray[x] ***\n
        \n");
33     printf("Integer Array Elements And Their Addresses : \n\n");
34     printf("ptr_iArray[0] = %d \t At Address &ptr_iArray[0] : %p\n", ptr_iArray
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[0], &ptr_iArray[0]);
35     printf("ptr_iArray[1] = %d \t At Address &ptr_iArray[1] : %p\n", ptr_iArray    ↗
    [1], &ptr_iArray[1]);
36     printf("ptr_iArray[2] = %d \t At Address &ptr_iArray[2] : %p\n", ptr_iArray    ↗
    [2], &ptr_iArray[2]);
37     printf("ptr_iArray[3] = %d \t At Address &ptr_iArray[3] : %p\n", ptr_iArray    ↗
    [3], &ptr_iArray[3]);
38     printf("ptr_iArray[4] = %d \t At Address &ptr_iArray[4] : %p\n", ptr_iArray    ↗
    [4], &ptr_iArray[4]);
39     printf("ptr_iArray[5] = %d \t At Address &ptr_iArray[5] : %p\n", ptr_iArray    ↗
    [5], &ptr_iArray[5]);
40     printf("ptr_iArray[6] = %d \t At Address &ptr_iArray[6] : %p\n", ptr_iArray    ↗
    [6], &ptr_iArray[6]);
41     printf("ptr_iArray[7] = %d \t At Address &ptr_iArray[7] : %p\n", ptr_iArray    ↗
    [7], &ptr_iArray[7]);
42     printf("ptr_iArray[8] = %d \t At Address &ptr_iArray[8] : %p\n", ptr_iArray    ↗
    [8], &ptr_iArray[8]);
43     printf("ptr_iArray[9] = %d \t At Address &ptr_iArray[9] : %p\n", ptr_iArray    ↗
    [9], &ptr_iArray[9]);
44     return(0);
45 }
46
47
48
```