**Array**

|  |  |
| --- | --- |
|  | **Find the smallest number from an array.** |
|  | |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | 10 | 15 | 45 | 20 | 25 | 6 | 1 | 100 | 65 | 99 | | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |  |  |  | | --- | --- | | small | 1 |   **Input (***Declarations and Initializations***):** int arr[10], int small = 9999999999.  **Process:**   1. Compare the value of ***small*** with the ***element*** in the ***index-value*** 0 of the array. 2. Store the smaller number into ***small***. 3. Increase the value of index by 1. 4. Repeat (1), (2) and (3) for all the indexes.   **Output:** Print **t**he value of ***small***. |
|  | **Search a particular number from an array.** |
|  | |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | 10 | 15 | 45 | 20 | 25 | 6 | 1 | 100 | 65 | 99 | | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |  |  |  |  |  |  | | --- | --- | --- | --- | --- | | item | 25 |  | position | -1 |   **Input (***Declarations and Initializations***):** int arr[10], int item, int position = -1.  **Process:**   1. Compare the value of ***item*** with the ***element*** in the ***index-value*** 0 of the array. 2. If, they are equal, the value of ***position*** will be the value of the ***index*** and exit. Else, go to next index. 3. Repeat (1) and (2) for all the indexes.   **Output:**   1. Check the value of position.   If, it is -1, Print ***item*** not found in the array.  Else, Print ***item***foundat ***position***. |
|  | **Find the summation of the numbers of an array.** |
|  | |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | 10 | 15 | 45 | 20 | 25 | 6 | 1 | 100 | 65 | 99 | | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |  |  |  | | --- | --- | | sum | 386 |   **Input (***Declarations and Initializations***):** int arr[10], int sum = 0.  **Process:**   1. Add the value of ***sum*** with the ***element*** in the ***index-value*** 0 of the array. 2. Store the summation of the addition of (1) in ***sum***. 3. Increase the value of the index by 1. 4. Repeat (1), (2) and (3) for all the indexes.   **Output:** Print **t**he value of ***sum***. |
|  | **Find the summation of even numbers of an array.** |
|  | |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | 10 | 15 | 45 | 20 | 25 | 6 | 1 | 100 | 65 | 99 | | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |  |  |  | | --- | --- | | sum | 136 |   **Input (***Declarations and Initializations***):** int arr[10], int sum =0.  **Process:**   1. Check, whether the element in ***index-value*** 0 is an even number. If yes, go to (2), else, go to (4) 2. Add the value of ***sum*** with the ***element*** in that index. 3. Store the summation of the addition of (2) in ***sum***. 4. Increase the value of the index by 1. 5. Repeat (1), (2), (3) and (4) for all the indexes.   **Output:** Print **t**he value of ***sum***. |
|  | **Find the summation of even indexed numbers of an array.** |
|  | |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | 10 | 15 | 45 | 20 | 25 | 6 | 1 | 100 | 65 | 99 | | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |  |  |  | | --- | --- | | sum | 146 |   **Input (***Declarations and Initializations***):** int arr[10], int sum =0.  **Process:**   1. Add the value of ***sum*** with the ***element*** in the ***index-value*** 0 of the array. 2. Store the summation of the addition of (1) in ***sum***. 3. Increase the value of the index by 2. 4. Repeat (1), (2) and (3) for all the indexes.   **Output:** Printthe value of ***sum***. |
|  | **Count the appearance of a particular number in an array.** |
|  | |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | 10 | 15 | 45 | 20 | 45 | 6 | 1 | 100 | 45 | 99 | | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |  |  |  |  |  |  | | --- | --- | --- | --- | --- | | item | 45 |  | count | 3 |   **Input (***Declarations and Initializations***):** int arr[10], int item, int count = 0.  **Process:**   1. Compare the value of ***item*** with the ***element*** in the ***index-value*** 0 of the array. 2. If, they are equal, increase the value of ***count*** by 1. Else, go to next index. 3. Repeat (1) and (2) for all the indexes.   **Output:** Print ***item*** appeared ***count*** times. |
|  | **Merge two arrays into one array.** |
|  | |  |  |  |  |  | | --- | --- | --- | --- | --- | | 40 | 30 | 70 | 90 | 100 | | 0 | 1 | 2 | 3 | 4 |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | 10 | 15 | 45 | 20 | 65 | 6 | 1 | | 0 | 1 | 2 | 3 | 4 | 5 | 6 |  |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | 40 | 30 | 70 | 90 | 100 | 10 | 15 | 45 | 20 | 65 | 6 | 1 | | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |   **Input (***Declarations and Initializations***):** int arr1[5], int arr2[7], int m\_array[5+7].  **Process:**   1. Store the elements of ***arr1*** in the ***1st 5 indexes of m\_array***. 2. Store the elements of ***arr2*** in the ***m\_array*** starting from ***index-value 5*** of ***m\_array***.   **Output:** Print the array **m\_array.** |