**Array Practice Questions**

1. WAP to input an array of N number of elements and display it.
2. WAP to input an array of N number of elements and display it in reverse order.
3. WAP to input an array of N number of elements and find the sum and average of all the elements of that array.
4. WAP to input an array of N number of elements and count total number of positives, negatives and zero elements in that array and display those counts.
5. WAP to input an array of N number of elements and store all even numbers in 1 array and all odd numbers in another array. Print both the even and odd array separately.
6. WAP to input an array of N number of elements and find their standard deviation.
7. Suppose there is president election in US and there are 2 candidates Trump and Biden. Input the votes of both the candidates in 10 states of US and calculate state-wise winner and overall winner.
8. WAP to read the marks of 500 students of a course in computer programming and print the frequency of each score above 60. Do it using most efficient method you could taking minimum memory and minimum time.
9. WAP to input an array of N number of elements and find the largest element in that array.
10. WAP to input an array of N number of elements and find the smallest element in that array.
11. WAP to input an array of N number of elements and swap the largest and smallest element in that array and print the updated array.
12. WAP to input an array of N number of elements and find the second smallest element and 2nd largest element in that array.
13. WAP to input an array of N number of distinct elements. Input an element you want to search and find it. If found then print the position of that element otherwise print not found.
14. WAP to input an array of N number of elements (Elements can repeat) . Input an element you want to search and find it. If found then print all the positions of that element otherwise print not found.
15. WAP to input an array of N number of elements and sort it in ascending order using bubble sort.
16. WAP to input an array of N number of elements and sort it in descending order using bubble sort.
17. WAP to input an array of N number of elements. Input an element you want to insert in that array along with the position and insert it. Print the final array after insertion.
18. WAP to input an array of N number of elements. Input E no. of elements you want to insert in that array along with their positions and insert all of them. Print the final array after insertion of all elements.
19. WAP to input an array of N number of elements. Input the position of element you want to delete. Print the element deleted and updated array after deletion of that element.
20. WAP to input an array of N number of elements. Input the element you want to delete and delete the first occurrence of that element from that array. Print the updated array.
21. WAP to input an array of N number of elements. Input the element you want to delete and delete all occurrence of that element from that array. Print the updated array.
22. WAP to input an array of N number of elements. Left rotate this array by R number of rotations and print the final array.

Example:- Suppose array is 4 5 3 9 1

After left rotation by 1 it will be 5 3 9 1 4

1. WAP to input an array of N number of elements. Right rotate this array by R number of rotations and print the final array.

Example:- Suppose array is 4 5 3 9 1

After Right rotation by 1 it will be 1 4 5 3 9

1. WAP to input an array of N number of elements and find the frequency of an inputted element in that array.
2. WAP to input an array of N number of elements and find the frequency of all elements in that array.
3. WAP to input an array of N number of elements . Traverse this array from starting to end , if element found is prime then convert it into palindrome number next to it and if its not prime(composite) then convert it into next Armstrong number. print the updated array.
4. WAP to input an array of N elements and delete all the elements from that array which are perfect number.
5. WAP to input an array of N number of elements and delete all the duplicate elements from that array.
6. Consider a scenario where there are two classes A and B having 30 students each. A test was conducted for both the classes in a single room and student having same class roll number but from different classes was made to sit together and as a result they copied from each other and scored equal marks. Wap in ‘C’ to compute the marks of class B students based on the marks of class A students (using Arrays).
7. Write a program in ‘C’ to store (in an array) and print the roll numbers of students beginning from m to n.
8. Find the output of following .

a.) #include<stdio.h>

|  |
| --- |
| int main(){    int arr[5];    arr[0] = 5;    arr[2] = -10;    arr[3/2] = 2;    arr[3] = arr[0];    printf("%d %d %d %d", arr[0], arr[1], arr[2], arr[3]);    return 0;  } |

b.) #include<stdio.h>

int main(){

int arr[2] = {10, 20, 30, 40, 50};

printf("%d %d %d %d %d",arr[0],arr[1],arr[2],arr[3],arr[-1]);

return 0;

}

c.) #include<stdio.h>

int main(){

int arr[10] = {1,2,3};

printf("%d %d %d %d",arr[0],arr[2],arr[4],arr[6]);

return 0;

}

**Q32.** Consider an array [8] containing following elements-

12, 5, 17, 87, 109, 43, 44, 47

Show the process of bubble sort on this array.

**Q32.** Assume an array consists of following elements-

19 45 67 78 89 56

Apply linear search algorithm to search the element 78 on this array.

**Q34.** Consider an array ar[7] -

12 67 45 34 87 90 23

What will be the contents of this array after execution of following code?

for(i=2; i<=5;i++)

ar[i]=ar[i+1];

**Q35.** Consider an array ar[7] -

12 67 45 34 87 90 23

What will be the contents of this array after execution of following code?

for(i=7; i>=3;i--)

ar[i-1]=ar[i];

**Q36.** What will be the output of following program?

int main(void) {

int i;

int a[5]={1,2,3,4,5};

for(i=5;i>=2;i--)

a[i-1]=a[i-2];

for(i=0;i<5;i++)

printf("%d ",a[i]);

return 0;}

**Q37.** What will be the output of following program?

int main(void) {

int i;

int a[5]={1,2,3,4,5};

for(i=5;i>=2;i--)

a[i+1]=a[i-2];

for(i=0;i<5;i++)

printf("%d ",a[i]);

return 0;}