

Tutorial Sheet : Nested Loop

Q1. Write a program in C++ to find whether there exist i, j such that $A[i] + A[j] = k$ in unsorted array.

Sample Input :

5
17
1 10 5 6 7

Sample Output :

Yes

Q2. Write a program in C++ to find frequency of element in an array.

Sample Input :

5
8 5 6 5 6

Sample Output :

5 : 2
6 : 2
8 : 1

Q3. Write a program in C++ to find element that has maximum frequency in an array.

Sample Input :

5
2 3 2 1 5

Sample Output :

2

Q4. Write a program in C++ to find the elements that occur 'k' times in an array.

Sample Input :

5
2
2 3 2 3 5

Sample Output :

2
3

Q5. Write a program in C++ to convert an array of size 'n' into a matrix of size 'a x b' where $n = ab$ (start filling elements row-wise).

Sample Input :

10
2 5
1 2 3 4 5 6 7 8 9 10

Sample Output :

1 2 3 4 5
6 7 8 9 10

Q6. Given a matrix. Create two arrays, one array will hold all odd values of matrix and other array will hold all even values of matrix.

Sample Input :

3 3
1 2 3
4 5 6
7 8 9

Sample Output :

2 4 6 8
1 3 5 7 9

Q7. Write a program in C++ to find unique elements in an array. List all the elements that exists in the array.

Sample Input :

10
3 5 8 7 9 6 3 4 5 7

Sample Output :

3
5
8
7
9
6
4
