

## BASIC PROGRAMMES

1. <https://www.hackerrank.com/contests/smart-interviews-basic/challenges/si-basic-the-missing-number>
2. <https://www.hackerrank.com/contests/smart-interviews-basic/challenges/si-basic-compute-area-of-rectangle>
3. <https://www.hackerrank.com/contests/smart-interviews-basic/challenges/si-basic-triangle-validator>
4. <https://www.hackerrank.com/contests/smart-interviews-basic/challenges/si-basic-number-reverse>
5. <https://www.codechef.com/problems/DISCNT>
6. <https://www.codechef.com/problems/TVDISC>
7. <https://www.codechef.com/problems/CHEFCAND>
8. <http://codechef.com/problems/SUGARCANE>
9. <https://www.codechef.com/problems/DIFFSUM>
10. <https://www.hackerrank.com/contests/smart-interviews-basic/challenges/si-basic-squares-sum>
11. <https://www.codechef.com/problems/MANIPULATE>
12. <https://www.codechef.com/problems/CREDSCORE>
13. <https://www.codechef.com/problems/COURSEREG>
14. <https://www.codechef.com/problems/THREETOPICS>
15. <https://www.codechef.com/problems/TAXES>

## Arrays

1. <https://www.hackerrank.com/contests/smart-interviews-basic/challenges/si-basic-max-element>
2. <https://www.hackerrank.com/contests/smart-interviews-basic/challenges/si-basic-reverse-array>
3. <https://www.hackerrank.com/contests/smart-interviews-basic/challenges/si-basic-print-unique-elements-of-array>
4. <https://codeforces.com/problemset/problem/405/A>
5. <https://www.codechef.com/problems/CRCTEAM>

## 2D-arrays: Matrices

1. <https://www.hackerrank.com/contests/smart-interviews-basic/challenges/si-basic-matrix-row-sum>
2. <https://www.hackerrank.com/contests/smart-interviews-basic/challenges/si-basic-matrix-column-sum>
3. <https://www.hackerrank.com/contests/smart-interviews-basic/challenges/si-basic-transpose-matrix>

## Loops

1. <https://www.codechef.com/problems/WATERCONS>
2. <https://www.codechef.com/problems/NNNEGPROD>
3. <https://www.codechef.com/problems/AMBIDEXTROUS>
4. <https://www.codechef.com/problems/STOCKMARKET>

patterns

1. <https://www.hackerrank.com/contests/smart-interviews-basic/challenges/si-basic-hollow-rectangle-pattern>
2. <https://www.hackerrank.com/contests/smart-interviews-basic/challenges/si-basic-print-half-diamond-pattern>
3. <https://www.hackerrank.com/contests/smart-interviews-basic/challenges/si-basic-inverted-pyramid-pattern>

EXTRA ARRAY QUESTIONS

### Question 1: Frequency of Each Number

**Problem:**

Given an array **A** of size **N** containing numbers from **1 to N**, find the frequency of each number in the array.

**Input:**

```
5
1 3 2 1 4
```

**Output:**

```
1: 2
2: 1
3: 1
4: 1
5: 0
```

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### Question 2: Count Distinct Numbers

**Problem:**

Given an array **A** of size **N**, find how many distinct numbers are present in the array.

**Input:**

```
5
1 2 1 3 1
```

**Output:**

**Question 3: Find Maximum Element****Problem:**

Find the maximum element in a given array of integers.

**Input:**

5  
-2 -19 8 15 4

**Output:**

15

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**Question 4: Sum of Odd Elements****Problem:**

Print the sum of all odd elements in an array.

**Input:**

5  
6 9 8 4 3

**Output:**

12

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**Question 5: Find Duplicate Element****Problem:**

Find a duplicate element in the given array of integers. There will be only a single duplicate element in the array.

**Input:**

6  
5 4 10 9 21 10

**Output:**

10

