Assignment 3

1. Write a program to print right triangle number pattern series using loop. Example: Input:5 Output: 1 22 333 4444 55555 2. Write a program to print hollow right triangle star pattern series using loop. Example: Input rows: 6 output * * * * * * 3. Write a program to print inverted right triangle star pattern series using loop. Example: Input rows: 6 output ***** *** ** 4. Write a program to take a number and find a list of non-prime numbers from 1 to this number. Example: Input:25. Output: 4 6 8 9 10 12 14 15 16 18 20 21 22 24 25.

5. Write a program in C++ to input any number and print it in words.

Example:

Input:8309.

Output: Eight Three Zero Nine

6. Write a program to input elements in an array from the user and count even and odd elements in the array.

Example:

Input array: 1 2 3 4 5 6 7 8 9

Total even elements: 4
Total odd elements: 5

7. Write a program to input elements in an array and search whether an element exists in the array or not.

Input elements in array: 10, 12, 20, 25, 13, 10, 9, 40, 60, 5

Element: 25

output

Element found at index 3

8. Write a C++ program to count the number of occurrences of a given number in an array of integers.

Example:

Input: 7

Array 5, 7, 8, 8, 5, 8, 7, 7

output: Number of occurrences of 7:3

9. Write a program to input elements in an array and copy all elements of the first array into the second array.

Input array1 elements: 10 1 95 30 45 12 60 89 40 -4

output

Array1: 10 1 95 30 45 12 60 89 40 -4 Array2: 10 1 95 30 45 12 60 89 40 -4

10. Write a program to input elements in array then print all unique elements in array.

Input array elements: 1, 2, 3, 5, 1, 5, 20, 2, 12, 10

Output

All unique elements in the array are: 3, 20, 12, 10

11. Write a program to input elements in an array and find two numbers whose sum equals the last element in the array .

Example:

```
Input: 1, 5, 7, 5, 8, 9, 11, 12
```

Output:

Array pairs whose sum equal to 12:

1,11

5,7

7,5

12. Write a program to print an equilateral triangle or Pyramid star pattern series of n rows using a loop.

Input rows: 5

*

13. Write a program to print a rhombus star pattern of N rows using a loop.

Enter number of rows: 6

***** *****
