1. Write a C++ program to convert seconds to hour, minute and seconds.

Input seconds: 86399

output: 23:59:59

2. Write a C++ program to extract the first half of a string of even length.

Test Data: Python Sample Output: Pyt

3. Write a program in Dart to make such a pattern like right angle triangle with a number which will repeat a number in a row.

The pattern is as follows:

1

22

333

4444



4. Write a program in Dart to display the n terms of odd natural number and their sum.

Test Data Input number of terms is: 5

Expected Output: The odd numbers are: 13579

The Sum of odd Natural Number up

to 5 terms is: 25

5. Generate a random number between 1 and 100. Ask the user to guess the number, then tell them whether they guessed too low, too high, or exactly right. Keep track of how many guesses the user has taken, and when the game ends, print this out.

6. write a Dart program that reads an positive integer and count the number of digits the number (less than ten billion) has.

Test Data Input an integer number less than ten

billion: 125463

Expected Output: Number of digits in the number: 6

7. Write a method that counts the occurrences of each capital character in a string. The method counts how many times a character in the upper case appears in the string. The return value is an array of elements, each of which holds the count for an upper character. Write a test program that prompts the user to enter a string and displays the number of occurrences of each upper character in the string.

## **Sample Input:**

Please enter a string:

12203ABCad3

## **Sample Output:**

A occurs 1

B occurs 1

C occurs 1