1. Write a program in C to input a number and

[3]

- a. Print no. of digits
- b. Sum of all unique digits present

For example Input: 33045 Output: 5

12

2. Write a program to implement division using increment and repeated subtraction operations only. (Quotient and remainder needed)

Input: Dividend = 28

Divisor = 6

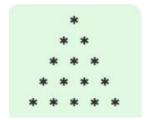
Output:

Quotient = 4

Remainder = 4

- 3. Write a program in C to input a 4 digit number and print all possible numbers that can be formed using the four digits. [5]
- 4. Write a program in C to print a triangle of size n. Use the following example as reference. [2]

Input: 5
Output:



5. Write a Program to take a series of integers as input from the user.

Use the continue statement to calculate the sum of the even integers only.

After each iteration of the loop, ask the user if he wants to continue or

not. If the user enters 'Y', take another integer as input. If user enters 'N', break the loop and print the sum. If the user presses any other character, a message should get displayed that its not a valid input The number of integers to be entered cannot be taken as input. User may enter capital Y or small y to continue, Similar thing to stop ... Capital N or small n.

Example:

Provide the number

1

Do you want to continue?

Υ

Provide the number

2

Do you want to continue?

Υ

Provide the number

10

Do you want to continue?

Υ

Provide the number

5

Do you want to continue?

U

Not a valid input

Η

Not a valid input

Υ

Provide the number

5

Do you want to continue?

Ν

The sum is: 12 **[5]** 

6. Given a character array of n characters, write a function that take a word from the user and checks whether the word can be made from the characters available in the array or not [5]

7. Write a program in C to sort an array of 10 integers using bubble sort.

[5]