Final Lab Test

CSE 126: Structured Programming Language Lab

Time: 1.30 hour Marks: 40

**Solve any 4 problems**

1. Write a C program to accept two integers and check whether they are equal or not.   
   Input : 15 15Expected Output :  Number1 and Number2 are equal

Input : 15 -15

Expected Output : Number1 and Number1 are not equal

1. Write a C program to check whether an alphabet is a vowel or consonant.   
   Test Data :   
   k  
   ExpectedOutput :  
   The alphabet is a consonant.
2. Write a program in C to make such a pattern like right angle triangle with a number which will repeat a number in a row. The pattern like :

1

22

333

4444

1. Write a program in C to find the sum of all elements of the array.

Test Data :   
Input the number of elements to be stored in the array :3   
Input 3 elements in the array :   
element - 0 : 2   
element - 1 : 5   
element - 2 : 8   
Expected Output :   
Sum of all elements stored in the array is : 15

1. Write a program in C to find the number and sum of all integer between 100 and 200 which are divisible by 9.   
   Expected Output :  
   Numbers between 100 and 200, divisible by 9 :   
   108 117 126 135 144 153 162 171 180 189 198   
   The sum : 1683
2. Write a program in C to make such a pattern like a pyramid with a number which will repeat the number in the same row.

1

2 2

3 3 3

4 4 4 4

1. Write a program in C for a 2D array of size 3x3 and print the matrix.    
   Test Data :   
   Input elements in the matrix :   
   element - [0],[0] : 1   
   element - [0],[1] : 2   
   element - [0],[2] : 3   
   element - [1],[0] : 4   
   element - [1],[1] : 5   
   element - [1],[2] : 6   
   element - [2],[0] : 7   
   element - [2],[1] : 8   
   element - [2],[2] : 9   
   *Expected Output* :   
   The matrix is :   
   1 2 3   
   4 5 6   
   7 8 9
2. Write a program in C to find the sum of the series 1+11+111+1111+…n terms.   
   Test Data :   
   Input the number of terms : 5   
   *Expected Output* :  
   1 + 11 + 111 + 1111 + 11111   
   The Sum is : 12345