**TUTORIAL 5**

**Question 1**

Write a C program that asks the user to enter the marks of 10 students into an array and then display out the marks of each student in a table, as shown below:

*Student Marks*

*1 76*

*2 56*

*3 98*

*4 75*

*5 48*

*6 32*

*7 68*

*8 65*

*9 73*

*10 90*

**Question 2**

Use one-dimensional arrays to solve the following problem. Read in two sets of numbers, each having 10 numbers. After reading all values, display the values that are common to both sets of numbers.

**Question 3**

Write a function *Minimum* that takes an integer array with 12 values and returns the smallest element of the array.

**Question 4**

Write a function *stringReverse* that takes a character array as an argument, prints it back to front and returns nothing. The function should stop processing and return when the terminating null character of the string is encountered.

**Question 5**

An *n x m* two-dimensional matrix can be multiplied by another *m x p* matrix to give a matrix whose elements are the sum of the products of the elements within a row from the first matrix and the associated elements of the second matrix. Both matrices should either be square matrices or the number of columns of the first matrix should equal the number of rows of the second matrix.

To calculate each element of the resultant matrix, multiply the first element of the given row from the first matrix and the first element of a given column in the second matrix, add that to the product of the second element of the same row and the second element of the same column, and keep doing so until the last elements of the row and column have been multiplied and added to the sum.

Write a C program to calculate the product of 2 matrices and store the result in a third matrix.