SCHOOL OF COMPUTING
Faculty of Engineering

UNIVERSITI TEKNOLOGI MALAYSIA

LE04

SEMESTER I 2019/ 2020

SUBJECT CODE	**: SECJ1013-05 & SCSJ1013-05**
SUBJECT NAME	**: PROGRAMMING TECHNIQUE I**
YEAR/COURSE	**: 1 SCSV / SCSJ**
TIME	**: (30 MINUTES)**
DATE	**: 28th November 2019 (THURSDAY)**
VENUE	**: MPK05/MPK01**

INSTRUCTIONS TO THE STUDENTS:

You are required to submit a cpp file only via UTM e-learning. Save it as LE04.cpp. Put your name & ID no. at beginning of your program as comments.

Name	
I/C No.	
Section	
Lecturer's Name	

This question booklet consists of **pages** inclusive of the cover page.

QUESTION

Look at the following table containing prices of certain items, these numbers can be read into a two-dimensional array.

12.78	23.78	45.67	12.67
7.83	4.89	5.99	56.84
13.67	34.84	16.71	50.89

You will be given incomplete program which is price.cpp.

Task 1: Fill in the code to complete both functions `getPrices` and `printPrices`, then run the program with the following data:

```
Please input the number of rows from 1 to 10
2

Please input the number of columns from 1 to 10
3

Please input the price of an item with 2 decimal places
1.45

Please input the price of an item with 2 decimal places
2.56

Please input the price of an item with 2 decimal places
12.98

Please input the price of an item with 2 decimal places
37.86

Please input the price of an item with 2 decimal places
102.34

Please input the price of an item with 2 decimal places
67.89

        1.45    2.56        12.98
        37.86   102.34      67.89
```

Task 2: The following code is a function that returns the highest price in the array. After studying it very carefully, place the function in the above program and have to display out the highest value at function call in main function. (NOTE: This is a value returning function. Be sure to include its prototype in the global section.)

```
float findHighestPrice(PriceType table, int numOfRows, int numOfCols)
// This function returns the highest price in the array
{
      float highestPrice;

      highestPrice = table[0][0]; // make first element the highest price

      for (int row = 0; row < numOfRows; row++)
            for (int col = 0; col < numOfCols; col++)
                  if ( highestPrice < table[row][col] )
                        highestPrice = table[row][col];

      return highestPrice;
}
```

Task 3: Create another value returning function that finds the lowest price in the array and have to display out that value.