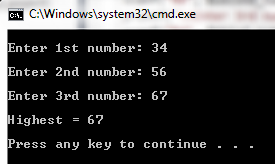
**TUTORIAL 6**

**Question 1**

Write a C program with a function to determine the highest value of three input. Your solution should look similar to the figure below. Pass the value of the 3 inputs to the function by using the pass-by-reference method.



**Question 2**

Write a C program with a function that request the user to enter the price of an item and gives a 20% discount if the price of the item is less than $10 and gives a 30% discount for an item that costs $10 or higher. Pass the price of the item to the Discount function by using the pass-by-reference method.

**Question 3**

Write a C program that allows the user to choose whether to add, subtract, multiply or divide two numbers. The program should then input two double values from the user, perform the appropriate calculation and display the result. Use an array of function pointers in which each pointer represents a function that returns void and receives two double parameters. The corresponding functions should each display messages indicating which calculation was performed, the values of the parameters and the result of the calculation.

**Question 4**

Write a function that shifts the stored value of five character variables in a circular fashion. Your function should work in the following way. Suppose that c1, c2, c3, c4 and c5 are variables for type char and suppose that the values of these variables are ‘A’, ‘B’, ‘C’, ‘D’ and ‘E’ respectively. The function call *shift(&c1,&c2,&c3,&c4,&c5)* should cause the variables c1, c2, c3, c4 and c5 to have values ‘B’, ‘C’, ‘D’, ‘E’ and ‘A’ respectively. Your function definition should start as follows:

*void shift(char \*p1, char \*p2, char \*p3, char \*p4, char \*p5)*

*{ …*

Test your function by calling it five times and printing out in turn BCDEA, CDEAB, DEABC and ABCDE.