

## Lab # 7

### Task 1:

Write an Assembly Language Program that lets the user to Enter 5 binary numbers 8 bit each, store these numbers in an array and then display these numbers in Hexadecimal form on console. Design following two procedures for this task:

1. **“BinaryInput”** to get a single 8-bit number from user.
2. **“HexadecimalOutput”** to display a single 8-bit hexadecimal number on console.

### Task 2:

Write a program that will read a string from the user (**assume that string only contain capital and small letters without spaces end by a carriage return**), After inputting you have to display the given string in ascending order. **Note: All capital letters are smaller than the small letters. Pseudo code for sorting is given below.**

(Input is underlined in sample run, only to distinguish from display messages)

**Sample Run 1:**

Enter the String: AXrLzCoyBZD

Sorted String is: ABCDLXZoryz

**Sample Run 2:**

Enter the String: deMAiZWmb

Sorted String is: AMZWbdeim

**Hint:**

**Pseudo code for sort any array in ascending order:**

```
int arr [10]= {10, 3, 1, 4, 9, 34, 41, 2, 22, 5 }
for (int i=0 ; i < 10; i++)
{
    for (int j= i+1; j < 10; j++)
    {
        if( a[i] > a[j])
        {
            int temp = a[i];
            a[i] = a[j] ;
            a[j] = temp;
        }
    }
}
```