

Lab Program 11

For this and all future labs, I strongly encourage you to begin your programs with a comment header similar to the following:

```
/*  
Programmer: First & Last Name  
Class: CSCE 1030 Lab  
Date: Today's Date  
Assignment: Lab 10  
cspXX.csci.unt.edu  
*/
```

You are welcome to include more information if you like. This week's assignment we will continue our look at strings, and dig deeper into user defined functions. Please avoid “**magic numbers**” when possible and have clean and clear indentions. **I would highly suggest you take advantage of the started code that I have provided at the end of assignment.** Name your file accordingly:

LastnameProg11.c.

Functions:

1. **FindMaxValue**: this function should accept an array of integers and an integer value as its input parameters. The function should find the largest value in the array and print it to the screen.
2. **SumOfArray**: this function should accept an array of integers and an integer value as its input parameters. The function should find the sum of all values in the array and return that value.
3. **ASCIIToInteger**: this function should accept a string as its input parameter. It should print out each character as well as the characters' corresponding decimal value for an ASCII chart.

The program should:

1. Print the highest value in the provided integer array.
2. Print the sum of values of the provided integer array.
3. Ask the user for first X number of characters in their name. (Hint X should be a constant)
4. Print each character in the string as well as the characters' ASCII decimal value. (Print statement has been provided)

Example:

```
XXXXXXXXXXXXXXXXXXXXX  
Largest value in array is: 101  
The sum of the array is: 420
```

What are the first 9 characters of your name?

```
TylerDurdan  
Integer value of ASCII input is  
T : 84  
y : 121  
l : 108  
e : 101  
r : 114
```

D : 68
u : 117
r : 114
d : 100
e : 101
n : 110

XXXXXXXXXXXXXXXXXXXX

Sample Code

```
/* Programmer Name:
   Class: CSCE 1030 Lab
   Date: Today's Date
   Assignment: Lab 11
   cspXX.csci.unt.edu
*/

#include<stdio.h>
#include<stdlib.h>
#include<string.h>

#define ARRAYSIZE 10
#define CROSSBAR printf("XXXXXXXXXXXXXXXXXXXX\n");

void FindMaxValue(int arrayOfIntegers[], int arraySize)
{
    return;
}

int SumOfArray(int arrayOfIntegers[], int arraySize)
{
    int sum;

    return sum;
}

void ASCIItoInteger(char * string)
{
    int i;

    //As promised, the printf statement
    printf("%c : %d\n", string[i], (int)string[i]);

    return;
}

int main(void) {

    char firstName[ARRAYSIZE];
    int arrayInt[ARRAYSIZE] = {17, 64, 37, 34, 59, 101, 8, 84, 13, 5};

    return 0;
}
```