

# Computer Programing Lab

## Assignment # 02:

Weight: 4.00

Due Date: 03-03-2018

**Note:** Must read the file "C++ Style Guidelines" and apply it anywhere in you programs.

## Problem

Design a class **IntType** (an updated version of C++ **int** class) with one member variable of type **integer** and the following member functions. Include the all type of constructors and destructor. You can add further user defined functions if any.

- `void setNum(int num);`
- `void printNum();`
- `int numLength();`
- `int int_to_string();`
- `int reverseNum();`
- `int sum_all_digits();`
- `int avg_of_digits();`
- `int mid_digit();`
- `int remainder();`
- `bool pallindrom();`
- `int count_evens();`                      `int count_odds();`
- `int max_digit();`                      `int min_digit();`
- `int sum_even_digits();` `int sum_odd_digits();`
- `int append_digit( int num );` `int delete_digit( int num )`
- `int toBinary();`                      `int toHexadecimal();`                      `int toAscii();`
- `int add(intType num1, intType num2);`
- `int sub(intType num1, intType num2);`
- `int multiply(intType num1, intType num2);`
- `int divide(intType num1, intType num2);`

Create your own Header file/Library (`#include "intType"`) for above defined class and test all of their functions by calling them in main program. You can make Header file by separating the function prototypes and functions body implementation code in separate files.

Good Luck 😊