

**Jordan University of Science & Technology**  
**Department of Network Engineering and Security**  
**NES416- Network Programming**  
**Programming Assignment 1**

**Due Date: see course website**

**Purpose:** Refresh C-programming skills

*\*Note: this assignment is done individually NOT in a group*

**Description:**

In this assignment, you are required to write a *stand-alone* C program under UNIX/Linux that displays a menu for the user to select a mathematical operation and return the result

**Requirement:**

You need to implement your own code, and you are responsible to make sure it is your own writing.

The program, once started, displays a menu for the user. The menu displays operations for the user to select from. When the user selects an operation, he/she is prompted to enter 16-bit integer(s) for that operation, the program computes the result, displays it on the screen, and re-displays the menu again. If the user selects to exits, the program terminates.

The menu has the following format:

1. Add
2. Modulus
3. Complement
4. Power
5. Exit

*If the user selects option1, he/she is prompted to enter two 16-integer (positive or negative), to perform addition operation of the two integers properly*

*If the user selects option2, he/she is prompted to enter two 16-integer (positive or negative), to perform modulus operation of the first integer to the second one properly*

*If the user selects option3, he/she is prompted to enter one 16-integer (positive or negative), to perform it one's complement properly*

*If the user selects option4, he/she is prompted to enter two 16-integer (positive or negative), to perform first integer to the power of the second one properly*

## **Submission:**

- You files should follow the following naming convention: yourID\_HW#
  - INSIDE YOUR FILE, indicate group members (in any) as a comment
- Submit a zipped file containing only the course code ( following the naming convention) and a screen shot of compiling and running your code

## **Notes/Hints:**

- 1- make sure you check-error your code , and test your code thoroughly
- 2- Make sure you comment your code reasonably
- 3- Submit your source code using the link of the elearning site.
- 4- Your programs should be compiled and run without any single error or warning.
- 5- Use structured programming style. i.e use as many functions as possible in your implementation
- 6- Ubuntu 16.x will be used as grading environment