Assignment Set 7 (Uploaded on September xx, 2014) Clarification deadline date: October 9, 2014 Submission deadline date: October 11, 2014

Problem 1: Write C code for the following problem:

A "big integer" is an integer whose digits are stored as elements of

an array

- (a) Represent integers with one digit per entry of an array; [20]
- (b) Compute addition, multiplication of two integers stored as
- "big integers"; the resultant should also be stored as a "big integer". [60]
- (c) Compute the factorial of n; where n is a positive integer. n

should be stored as a "big integer". [40]

[Marks: $120\{(a) \text{ to } (c)\} + 30 \{Good programming habits\} =$ 150]

Naming conventions for program files. xx is your roll number:

For Problem 1:

The name of the src file for problem 1 of assignment 7 should be

``cs14xx-assign7-src-prog1.c''.

The name of the app file for problem 1 of assignment 5 should be

``cs14xx-assign7-prog1.c''.

The name of the include file for problem 1 of assignment 5 should be

``cs14xx-assign7-prog1.h''.

At the top of each of your program files, add the following. If you are writing multi-file programs, then each file should have it.

| /* | |
|----------------------|--|
| , | |
| Name: | |
| | |
| Roll Number: | |
| Date of Submission: | |
| Deadline date: | |
| Program description: | |
| Acknowledgements: | |
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| */ | |
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