

CENG 212

CONCEPTS OF PROGRAMMING LANGUAGES

HOMEWORK - 3

Due Date: 28 MAY 2017, 23:55

1. Write a Prolog Code to implement Extended Euclidean Algorithm whose detail can be found in the link below.

<http://www-math.ucdenver.edu/~wcherowi/courses/m5410/exeucalg.html>

2. Discuss the details in different implementations of Extended Euclidean Algorithm in logic, functional and imperative languages. (Prolog, Scheme, and Java, as an example, respectively). Your explanation should include various aspects such as: Memory usage, Iteration count, Execution time, Ease of implementation, etc.