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CS 153

CS 153 Project Writeup

1. Programming Language Used:
   a. Python 2.7.13
2. Operating System Used in development:
   a. Windows 10 Home
3. Git Repository Link:
   a. https://github.com/YsabelDoquenia/CS153Project.git
4. Reflection on the Development Process
   a. Which part(s) of the project, if any, did you find easy to do? Why do you think did you find these easy to do?
      (1) I had an easy time implementing the Addition and Subtraction part. It was very easy because all I had to do was to XOR the values with the variable x of the same degree.
      (2) I also had an easy (and fun) time doing the extra functions such as printEquation() [prints array of coefficients into a polynomial], coeffValidation() [input validation for polynomial], binaryValidation() [input validation for irreducible polynomial], and removeZero() [removes leftmost zeroes coefficients in polynomial]. These were easy because it needed just basic python/coding skills.
   b. Which part(s) of the project, if any, did you find challenging to do? Describe how you solved these challenges
      (1) I was challenged doing the functions modulo() [solves for the remainder], multiplyBitwise() [multiplies two numbers bitwise], multiply() [multiplies two polynomials], and divide() [divides two polynomials]. To be able to correctly implement these, first re-practiced solving everything by hand (and checking with the reference given to us) so I can make sure when I code it, It will print the same results when I make my code print my solution.
5. Reference:
   a. Galois Field Calculator: http://www.ee.unb.ca/cgi-bin/tervo/calc2.pl
   b. CS 153 Notes