Project 1B

Team Six

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**A UML class diagram**

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| --- |
| poly |
| -termList:list<term> |
| -pushFront():void  -addTerm(term):void  +print():void  +loadExpression(string exp:void  +operator+(const poly& rhs): poly |

|  |
| --- |
| polyParser |
| -polyString:string |
| +nextTerm(int&, int&):void |

|  |
| --- |
| list<term> |

|  |
| --- |
| term |
| -coefficient:int  -exponent:int |
| +print():void  +updateCoefficient(int coefficient): void |

GitHub:

<https://github.com/jhsz72/Project1B>

**Efficiency of Algorithms**

* poly::addTerm:O(N) where N is number of terms in the polynomial
* poly::loadExpression: O(N) where N is number of characters in the expression (polyParser.nextTerm\*number of terms + poly.addTerm)
* poly::operator+:O(N) where N is the number of combined terms of the 2 polynomials
* poly::print:O(N) where N is the number of terms