605.202 Data Structures and Algorithms   LAB 0

Number base conversion – Use of Stack   **Due Tuesday, Week 1**

Student _____   Turned In _____

CORRECTNESS   _____/40 pts
-40 : Does not use a stack
-40 : Does not limit output to 32 bits
-10 : Does not properly calculate metrics
 -5 : Incorrect answers (each)
-20 : Does not Compile
-20 : Did not write Stack Code (Used Library)
-10 : Missing code for stack class
 -5 : No Test for overflow on array implementation
 -5 : uses Arraylists
 -5 : No empty check for stack
 -5 : No overflow check for array implementation of stack

STYLE/PROPER CODING   _____/20 pts
 -5 : Documentation - missing method and class header comments
 -5 : missing reasonable and appropriate in line documentation
 - 5 : Poor modularity
-10 : No Error checking

INPUT/OUTPUT   _____/10 pts
-5 : Output format hard to read
-5 : Only processes input from handout
-3 : Minimal additional input (1-2)
-2 : Does not echo input to output file
-2 : Error if blank line at end of file
-5 : Does not use named files for I/O
-2 : File Names hardcoded (each: In and out)
-10: no output

ENHANCEMENTS   _____/10 pts
+3 : Documentation
+3 : Error checking?
+2 : Output format? correct/succinct
+3 : Input cases
+3 : Statistics on output
+2 : timing
+3 : Comparison strategy
+3 : Graphs

ANALYSIS   _____/20 pts
4 : Justification of other data structures and design issues   -2 not addressed
3: Description of stack implementation and justification for choice   -1.5 not addressed
2 : Discuss stacks - Was it a good choice for this lab?   -1 not addressed
2 : Discussion of algorithm efficiency – time complexity   -1.5 not addressed
2 : Discussion of algorithm efficiency - space complexity   -1.5 not addressed
2 : Potential use of recursion   -1 not addressed
3 : What did you learn?   -1.5 not addressed
2 : What would you do differently next time?   -1 not addressed
-3 : incorrect formatting (margins, font, pitch, spacing)   You need to read the programming assignment guidelines
Name not in zip file name
Name not in analysis filename

TOTAL   _____/100 pts
_____ **days late @ 5 points per day penalty _____ pts**
 Other Remarks: _____/100 pts