COSC 251 – Programming Languages
Project 3
Spring 2014

Objective: Use Shakespeare to implement the generation of two pseudo-familiar sequences.

Your Task: Use Shakespeare to be able to generate the number at an inputted index for two somewhat familiar sequences. Here are the sequences (both sequences start with initial values [0,1,1]):

The first sequence is generated through the following function:

$a[n] = a[n-1]+a[n-2]+a[n-3]$

Which generates {0,1,1,2,4,7,13,24,44,81,149,…}.

The second sequence is generated through the following function:

$a[n] = a[n-1]+a[n-2]-a[n-3]$

Which generates {0,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,…}.

You should ask the user to input a 1 for the first sequence, or a 2 for the second sequence. You should then prompt the user to input an integer that represents the index that you want out of the sequence. You should then print the number at that index for the chosen sequence. You do not need to worry about error checking. You should match my prompts exactly.

Example program run:
```
1 for 1st sequence, 2 for 2nd
1
Enter index
6
13
```

Deliverables: your SPL source. It should work with the interpreter/compiler linked on the course page (Marlowe). It should have descriptive entries for dramatis personae, acts, and scenes.

Expectations: The code should run and perform the task assigned. That's about it. That's about all I can expect. If you use an outside source, be sure to document that source. Significant use of outside sources will result in a deduction. You are allowed to work in pairs for this project. If you choose to work with someone, one member of the pair should email me that information by 5:00pm, March 26th.

Extra Credit (15 points): The "speaking" parts must be in iambic pentameter.

Learning Targets: Esoteric language experience. Brain-melting programming paradigm experience.

DUE: April 2nd, 11:59pm via Blackboard