Keisuke Readme

The keisuke CSP model is in keisuke.py. The keisuke_csp function sets up Keisuke as a CSP. In keisuke_csp2.py, there is the attempt to model Keisuke as a CSP differently. The random puzzle generators are in keisuke_sample_test.py. Lastly, tests can be found in keisuke_tests.py.

In order to run the code (code is written in Python 3.4.3), it is recommended to run the keisuke_sample_run.py file. There are two functions there, one that will solve a randomly generated Keisuke puzzle and one that will solve a more difficult Keisuke puzzle.

The first function is run_puzzle(n) where n is the size of the puzzle. If you want to run a Keisuke puzzle of size 5, put the line run_puzzle(5) in main. Run the file with

```
python keisuke_sample_run.py
```

You can change the n in order to test puzzles of other sizes.

Similarly, the second function, run_hard_puzzle(n, m) takes a board size (n) and a subsection size (m). It generates a more difficult puzzle by trying to create a puzzle that maximizes the amount of subsections of size m in the puzzle. Uncomment the line run_hard_puzzle(5, 2) and adjust the numbers if needed. Run the file with

```
python keisuke_sample_run.py
```

Lastly, if you want to run the unit tests, run the file with

```
python keisuke_tests.py
```