

Digital Signal Processing Homework 1

B03901034 吳泓霖

Environment

```
1 OS: macOS 10.12.1 (16B2555)
2 Compiler: Apple LLVM version 8.0.0 (clang-800.0.42.1)
3           Target: x86_64-apple-darwin16.1.0
4           Thread model: posix
5 Processor: Intel(R) Core(TM) M-5Y71 CPU @ 1.20GHz
```

Instructions

- 1. Compiling: command `make` will compile three binaries: `train`, `test`, `accuracy`
- 2. Training:
Usage: `./train [iteration] [Initial Model file] [Input sequence file] [output file]`
- 3. Testing: Usage: `./test [Model list] [Testing Sequence file] [output file]`
- 4. Get accuracy:
Usage: `./accuracy [Test output file] [Answer file] [output accuracy file]`

Additional Analysis

Iterations	Accuracy	Running Time
1	0.766	0.843s
5	0.6484	3.720s
10	0.5408	7.529s
50	0.8228	34.207s
100	0.81	1m 10.432s
500	0.856	6m 13.623s
1000	0.8696	12m 21.764s
5000	0.8676	68m 42.761s

Accuracy v.s. Iteration

