Jonathan Woong
804305763
CS 111
Lab 1C

	Benchmark 1	Benchmark 2	Benchmark 3
Bash	Average user time: 0.469s Average sys time: 0.052s	Average user time: 0.4208s Average sys time: 0.0336s	Average user time: 0.4038s Average sys time: 0.032s
Simpsh	Average user time: 0.4345548s Average sys time: 0.65594s	Average user time: 1.2481216s Average sys time: 0.810476s	Average user time: 1.2763528s Average sys time: 0.910886s
Execline	Average user time: 0.01s Average sys time: 0.01s	Average user time: 0.204s Average sys time: 0.068s	Average user time: 0.346s Average sys time: 0.048s
Dash	Average user time: 0.434s Average sys time: 0.0522s	Average user time: 0.4026s Average sys time: 0.0342s	Average user time: 0.4036s Average sys time: 0.0348s
Tcsh	Average user time: 0.00s Average sys time: 0.00s	Average user time: 0.402s Average sys time: 0.008s	Average user time: 0.398s Average sys time: 0.01s

Fastest program for benchmark 1: execline
Fastest program for benchmark 2: execline
Fastest program for benchmark 3: execline

Design problem considered:
Fastest program for benchmark 1: tcsh
Fastest program for benchmark 2: execline
Fastest program for benchmark 3: execline

Conclusions:
My simpsh program is the slowest out of all the shells/interpreters. This makes sense because I am not as good of a programmer as the people who wrote these shells. Dash seems to be very similar to bash in terms of both system time and user time. Execline is faster than bash in all cases, and tcsh is the fastest of all three.
It is well known that dash is faster than bash due to its smaller size and less dependency on shared libraries. It is also well known that execline can be faster than bash under certain situations because it is simpler.