

### Example Testing Results of gush --- Name(s): \_\_\_\_\_

Basic user Interaction	Examples	Result
Simple command	/bin/ls	
Simple command with arg	/bin/ps -aux	
Single command with multiple arg	/usr/bin/nl -v 500 -i 2 message.txt	
	Return key	
<b>Built-in</b>		
Path	path /bin /usr/bin /usr/local/bin	
History	history	
History	!2	
Exit	Exit	
Kill	kill pid	
pwd	pwd	
Chdir	cd ..	
<b>Redirection and Pipe</b>		
Single pipe	/bin/ps -aux   /usr/bin/nl -v 201 -i 2	
Two or more pipe	ps -aux   grep/sbin   nl	
Simple redirect stdin	nl -v 111 -i 200 < message.txt	
Simple redirect stdout	ps -aux > tmp.txt	
Redirect stdin and stdout	nl -v 111 -i 200 < message.txt > test.txt	
Pipe with redirect	cat < message.txt   grep 1	
Multiple pipes	ps -aux   grep/sbin   wc -l	
<b>Process Control</b>		
Background process	./wasteTime &	
Multiple background processes	./wasteTime & ./wasteTime & ./wasteTime	
<b>Batch</b>		
Batch file processing	./gush twoDir.txt	

- wasteTime is a user written CPU-Bound program that takes ~ 2 minutes to run
- message is a text file with multiple lines of text
- twoDir is a command file with a mixture UNIX shell commands with arguments, pipes and redirection