```
~/L/C1/O/Do/I/SEM6/PHY47/P/bash_problems > ls
                                                                           17:32:41
                example2-copy.txt female.txt
copy.sh
                                                  test-copy.txt
example1-copy.txt example2.txt names-copy.txt
                                                   test.txt
example1.txt female-copy.txt names.txt
~/L/C1/O/Do/I/SEM6/PHY47/P/bash_problems > vim factorial.sh
                                                                          17:32:50
~/L/C1/O/Do/I/SEM6/PHY47/P/bash_problems > which -a bash
                                                                      24s 17:33:27
/opt/local/bin/bash
/opt/homebrew/bin/bash
/bin/bash
~/L/Cl/O/Do/I/SEM6/PHY47/P/bash_problems > vim factorial.sh
                                                                           17:33:37
                                                                   5m 1s 17:38:44
~/L/C1/0/Do/I/SEM6/PHY47/P/bash_problems > chmod u+x copy.sh
~/L/Cl/0/Do/I/SEM6/PHY47/P/bash_problems > chmod u+x factorial.sh
                                                                          17:39:06
~/L/Cl/0/Do/I/SEM6/PHY47/P/bash_problems > ./factorial.sh 11
                                                                          17:39:17
~/L/C1/O/Do/I/SEM6/PHY47/P/bash_problems > vim factorial.sh
                                                                          17:39:23
                                                                   2m 36s 17:42:06
~/L/C1/O/Do/I/SEM6/PHY47/P/bash_problems > ./factorial.sh
~/L/Cl/O/Do/I/SEM6/PHY47/P/bash_problems > ./factorial.sh 11
                                                                           17:42:11
~/L/C1/O/Do/I/SEM6/PHY47/P/bash_problems > vim factorial.sh
                                                                           17:42:14
~/L/Cl/O/Do/I/SEM6/PHY47/P/bash_problems > ./factorial.sh 11 12s 17:48:32
~/L/C1/O/Do/I/SEM6/PHY47/P/bash_problems > vim factorial.sh
                                                                          17:48:38
~/L/Cl/O/Do/I/SEM6/PHY47/P/bash_problems > echo $( factorial 11 ) 40s 17:49:23
zsh: command not found: factorial
~/L/C1/O/Do/I/SEM6/PHY47/P/bash_problems > vim factorial.sh
                                                                           17:49:35
~/L/C1/O/Do/I/SEM6/PHY47/P/bash_problems > ./fo
                                                                   1m 10s 17:50:59
zsh: no such file or directory: ./fo
~/L/C1/O/Do/I/SEM6/PHY47/P/bash_problems > ./factorial.sh
                                                                           17:51:02
11! = 39916800
37! = 1096907932701818880
~/L/C1/0/Do/I/SEM6/PHY47/P/bash_problems > cat factorial.sh
                                                                          17:51:10
#!/opt/homebrew/bin/bash
factorial(){
       if [ $1 -eq 0 ] || [ $1 -eq 1 ]; then
               echo 1
       else
               local subresult=$(factorial $(( $1 - 1)) )
               echo ((1 * subresult))
       fi
}
echo " 11! = $( factorial 11 )"
echo " 37! = $( factorial 37 )"
```