Sample Output

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CMPT300 Assignment 4 - UnixLs
April 12th 2024

Test Case 1: Base Case
./UnixLs

```
ywang@VANCARII-SURFACE:~/SFU/CMPT300/SFU_CMPT300_assignment4$ ./UnixLs
 CMPT300_a4_vm_questions.pdf   infodemo.c   makefile   part1-virtual-mem.docx   sample_output.txt
 UnixLs   UnixLs.c
```

Test Case 2: One flag
./UnixLs -l

```
ywang@VANCARII-SURFACE:~/SFU/CMPT300/SFU_CMPT300_assignment4$ ./UnixLs -l
  -rw-r--r-- 1    ywang    ywang    96670 Apr 11 2024 12:17 CMPT300_a4_vm_questions.pdf
  -rw-r--r-- 1    ywang    ywang      831 Apr 11 2024 13:15 infodemo.c
  -rw-r--r-- 1    ywang    ywang      154 Apr 11 2024 16:50 makefile
  -rw-r--r-- 1    ywang    ywang    15445 Apr 11 2024 12:17 part1-virtual-mem.docx
  -rw-r--r-- 1    ywang    ywang      120 Apr 11 2024 16:49 sample_output.txt
  -rwxr-xr-x 1    ywang    ywang    16792 Apr 11 2024 19:23 UnixLs
  -rw-r--r-- 1    ywang    ywang     6981 Apr 11 2024 19:04 UnixLs.c
```

./UnixLs -i

```
ywang@VANCARII-SURFACE:~/SFU/CMPT300/SFU_CMPT300_assignment4$ ./UnixLs -i
 3940649674655930 CMPT300_a4_vm_questions.pdf    48695170970957005 infodemo.c             9851624186230406 makefile
 3940649674656001 part1-virtual-mem.docx         57139420272288501 sample_output.txt     17169973579551408 UnixLs
 52917295621621808 UnixLs.c
```

Test Case 3: Combined Flag
./UnixLs -li

```
ywang@VANCARII-SURFACE:~/SFU/CMPT300/SFU_CMPT300_assignment4$ ./UnixLs -li
  3940649674655930 -rw-r--r-- 1    ywang    ywang    96670 Apr 11 2024 12:17 CMPT300_a4_vm_questions.pdf
 48695170970957005 -rw-r--r-- 1    ywang    ywang      831 Apr 11 2024 13:15 infodemo.c
  9851624186230406 -rw-r--r-- 1    ywang    ywang      154 Apr 11 2024 16:50 makefile
  3940649674656001 -rw-r--r-- 1    ywang    ywang    15445 Apr 11 2024 12:17 part1-virtual-mem.docx
 57139420272288501 -rw-r--r-- 1    ywang    ywang      120 Apr 11 2024 16:49 sample_output.txt
 17169973579551408 -rwxr-xr-x 1    ywang    ywang    16792 Apr 11 2024 19:04 UnixLs
 52917295621621808 -rw-r--r-- 1    ywang    ywang     6981 Apr 11 2024 19:04 UnixLs.c
```

./UnixLs -il

```
● ywang@VANCARII-SURFACE:~/SFU/CMPT300/SFU_CMPT300_assignment4$ ./UnixLs -il
   9007199255322892 -rw-r--r-- 1     ywang     ywang     96957 Apr 12 2024 15:48 a4_vm_questions.pdf
  48695170970957005 -rw-r--r-- 1     ywang     ywang       831 Apr 11 2024 13:15 infodemo.c
   9851624186230406 -rw-r--r-- 1     ywang     ywang       154 Apr 11 2024 16:50 makefile
   3940649674656001 -rw-r--r-- 1     ywang     ywang     15445 Apr 11 2024 12:17 part1-virtual-mem.docx
  57139420272288501 -rw-r--r-- 1     ywang     ywang       120 Apr 11 2024 16:49 sample_output.txt
  37999121856092998 -rwxrwxrwx 1     ywang     ywang        13 Apr 12 2024 11:15 symbolic_test_file.txt
  22799473113689550 -rw-r--r-- 2     ywang     ywang        41 Apr 12 2024 11:14 test_file.txt
  22799473113689550 -rw-r--r-- 2     ywang     ywang        41 Apr 12 2024 11:14 test_file2.txt
  21673573207033668 -rwxr-xr-x 1     ywang     ywang     16832 Apr 12 2024 11:17 UnixLs
  52917295621621808 -rw-r--r-- 1     ywang     ywang      7356 Apr 12 2024 11:11 UnixLs.c
```

./UnixLs -i -l

```
● ywang@VANCARII-SURFACE:~/SFU/CMPT300/SFU_CMPT300_assignment4$ ./UnixLs -i -l
   9007199255322892 -rw-r--r-- 1     ywang     ywang     96957 Apr 12 2024 15:48 a4_vm_questions.pdf
  48695170970957005 -rw-r--r-- 1     ywang     ywang       831 Apr 11 2024 13:15 infodemo.c
   9851624186230406 -rw-r--r-- 1     ywang     ywang       154 Apr 11 2024 16:50 makefile
   3940649674656001 -rw-r--r-- 1     ywang     ywang     15445 Apr 11 2024 12:17 part1-virtual-mem.docx
  57139420272288501 -rw-r--r-- 1     ywang     ywang       120 Apr 11 2024 16:49 sample_output.txt
  37999121856092998 -rwxrwxrwx 1     ywang     ywang        13 Apr 12 2024 11:15 symbolic_test_file.txt
  22799473113689550 -rw-r--r-- 2     ywang     ywang        41 Apr 12 2024 11:14 test_file.txt
  22799473113689550 -rw-r--r-- 2     ywang     ywang        41 Apr 12 2024 11:14 test_file2.txt
  21673573207033668 -rwxr-xr-x 1     ywang     ywang     16832 Apr 12 2024 11:17 UnixLs
  52917295621621808 -rw-r--r-- 1     ywang     ywang      7356 Apr 12 2024 11:11 UnixLs.c
```

./UnixLs -l -i

```
● ywang@VANCARII-SURFACE:~/SFU/CMPT300/SFU_CMPT300_assignment4$ ./UnixLs -l -i
   9007199255322892 -rw-r--r-- 1     ywang     ywang     96957 Apr 12 2024 15:48 a4_vm_questions.pdf
  48695170970957005 -rw-r--r-- 1     ywang     ywang       831 Apr 11 2024 13:15 infodemo.c
   9851624186230406 -rw-r--r-- 1     ywang     ywang       154 Apr 11 2024 16:50 makefile
   3940649674656001 -rw-r--r-- 1     ywang     ywang     15445 Apr 11 2024 12:17 part1-virtual-mem.docx
  57139420272288501 -rw-r--r-- 1     ywang     ywang       120 Apr 11 2024 16:49 sample_output.txt
  37999121856092998 -rwxrwxrwx 1     ywang     ywang        13 Apr 12 2024 11:15 symbolic_test_file.txt
  22799473113689550 -rw-r--r-- 2     ywang     ywang        41 Apr 12 2024 11:14 test_file.txt
  22799473113689550 -rw-r--r-- 2     ywang     ywang        41 Apr 12 2024 11:14 test_file2.txt
  21673573207033668 -rwxr-xr-x 1     ywang     ywang     16832 Apr 12 2024 11:17 UnixLs
  52917295621621808 -rw-r--r-- 1     ywang     ywang      7356 Apr 12 2024 11:11 UnixLs.c
```

Test Case 5: Improper Input
./UnixLs -li ~/SFU?

```
● ywang@VANCARII-SURFACE:~/SFU/CMPT300/SFU_CMPT300_assignment4$ ./UnixLs -li ~/SFU?
  error: No such file or directory
```

Test Case 6: Directory search
- **6.1: With flags**
./UnixLs -li ~SFU/CMPT300/

```
● ywang@VANCARII-SURFACE:~/SFU/CMPT300/SFU_CMPT300_assignment4$ ./UnixLs -li ~/SFU/CMPT300/
   6473924464533716 drwxr-xr-x 1     ywang     ywang      4096 Feb 21 2024 03:21 Assignment2
  69524319247566564 drwxr-xr-x 1     ywang     ywang      4096 Feb 26 2024 22:40 SFU_CMPT300_assignment2
   6192449487755562 drwxr-xr-x 1     ywang     ywang      4096 Feb 25 2024 22:42 SFU_CMPT300_assignment2 - Copy
   5066549582600514 drwxr-xr-x 1     ywang     ywang      4096 Mar 25 2024 23:48 SFU_CMPT300_assignment3
   9570149208444666 drwxr-xr-x 1     ywang     ywang      4096 Apr 11 2024 19:23 SFU_CMPT300_assignment4
```

- **6.2: Without flags**

./UnixLs ~/SFU/CMPT300/

```
ywang@VANCARII-SURFACE:~/SFU/CMPT300/SFU_CMPT300_assignment4$ ./UnixLs ~/SFU/CMPT300/
 Assignment2    SFU_CMPT300_assignment2    SFU_CMPT300_assignment2 - Copy    SFU_CMPT300_assignment3    SFU_CMPT300_assignment4
```

Test Case 7: File Search

./UnixLs -li infodemo.c

./UnixLs ../SFU_CMPT300_assignment2/makefile

./UnixLs -li ../SFU_CMPT300_assignment2/makefile

```
ywang@VANCARII-SURFACE:~/SFU/CMPT300/SFU_CMPT300_assignment4$ ./UnixLs -li infodemo.c
 48695170970957005 -rw-r--r-- 1    ywang    ywang    831 Apr 11 2024 13:15 infodemo.c
```

```
ywang@VANCARII-SURFACE:~/SFU/CMPT300/SFU_CMPT300_assignment4$ ./UnixLs ../SFU_CMPT300_assignment2/makefile
 ../SFU_CMPT300_assignment2/makefile
```

```
ywang@VANCARII-SURFACE:~/SFU/CMPT300/SFU_CMPT300_assignment4$ ./UnixLs -li ../SFU_CMPT300_assignment2/makefile
 11540474045847447 -rw-r--r-- 1    ywang    ywang    311 Feb 26 2024 11:10 ../SFU_CMPT300_assignment2/makefile
```

Test Case 8: Symbolic Links and Hard Links File

```
ywang@VANCARII-SURFACE:~/SFU/CMPT300/SFU_CMPT300_assignment4$ ./UnixLs -li
 3940649674655930 -rw-r--r-- 1    ywang    ywang    96670 Apr 11 2024 12:17 CMPT300_a4_vm_questions.pdf
 48695170970957005 -rw-r--r-- 1    ywang    ywang      831 Apr 11 2024 13:15 infodemo.c
 9851624186230406 -rw-r--r-- 1    ywang    ywang      154 Apr 11 2024 16:50 makefile
 3940649674656001 -rw-r--r-- 1    ywang    ywang    15445 Apr 11 2024 12:17 part1-virtual-mem.docx
 57139420272288501 -rw-r--r-- 1    ywang    ywang      120 Apr 11 2024 16:49 sample_output.txt
 37999121856092998 -rwxrwxrwx 1    ywang    ywang       13 Apr 12 2024 11:15 symbolic_test_file.txt
 22799473113689550 -rw-r--r-- 2    ywang    ywang       41 Apr 12 2024 11:14 test_file.txt
 22799473113689550 -rw-r--r-- 2    ywang    ywang       41 Apr 12 2024 11:14 test_file2.txt
 21673573207033668 -rwxr-xr-x 1    ywang    ywang    16832 Apr 12 2024 11:17 UnixLs
 52917295621621808 -rw-r--r-- 1    ywang    ywang     7356 Apr 12 2024 11:11 UnixLs.c
```