

The UNIX Is Command

Case 1: `./UnixLs -i, ./UnixLs -l, ./UnixLs -R`

Output:

▼ TERMINAL

```
Jeongwoonui-MacBookPro:Assignment_4 jeongwoonsuh$ ./UnixLs -i
3104742 UnixLs 3099290 makefile 3099650 subdir_test 3104741 UnixLs.o 3024161 UnixLs.h 2918678 assignment4_300.pdf 3024003 UnixLs.c
Jeongwoonui-MacBookPro:Assignment_4 jeongwoonsuh$ ./UnixLs -l
-rwxr-xr-x 1jeongwoonsuh staff 50296 Dec 06 2020 21:30 UnixLs
-rw-r--r-- 1jeongwoonsuh staff 121 Dec 06 2020 21:28 makefile
drwxr-xr-x 5jeongwoonsuh staff 160 Dec 06 2020 19:58 subdir_test
-rw-r--r-- 1jeongwoonsuh staff 5572 Dec 06 2020 21:30 UnixLs.o
-rw-r--r-- 1jeongwoonsuh staff 1111 Dec 06 2020 20:36 UnixLs.h
-rw-r--r-- 1jeongwoonsuh staff 113524 Nov 29 2020 22:17 assignment4_300.pdf
-rw-r--r-- 1jeongwoonsuh staff 7004 Dec 06 2020 21:28 UnixLs.c
Jeongwoonui-MacBookPro:Assignment_4 jeongwoonsuh$ ./UnixLs -R
UnixLs makefile subdir_test UnixLs.o UnixLs.h assignment4_300.pdf UnixLs.c

./subdir_test:
2_dir 1_dir

./subdir_test/2_dir:
mainsample.c

./subdir_test/1_dir:
for_test.png
Jeongwoonui-MacBookPro:Assignment_4 jeongwoonsuh$
```

Case 2: `./UnixLs -iRl`

Output:

▼ TERMINAL

```
Jeongwoonui-MacBookPro:Assignment_4 jeongwoonsuh$ ./UnixLs -iRl
3104742 -rwxr-xr-x 1jeongwoonsuh staff 50296 Dec 06 2020 21:30 UnixLs
3099290 -rw-r--r-- 1jeongwoonsuh staff 121 Dec 06 2020 21:28 makefile
3099650 drwxr-xr-x 5jeongwoonsuh staff 160 Dec 06 2020 19:58 subdir_test
3104741 -rw-r--r-- 1jeongwoonsuh staff 5572 Dec 06 2020 21:30 UnixLs.o
3024161 -rw-r--r-- 1jeongwoonsuh staff 1111 Dec 06 2020 20:36 UnixLs.h
2918678 -rw-r--r-- 1jeongwoonsuh staff 113524 Nov 29 2020 22:17 assignment4_300.pdf
3024003 -rw-r--r-- 1jeongwoonsuh staff 7004 Dec 06 2020 21:28 UnixLs.c

./subdir_test:
3099784 drwxr-xr-x 3jeongwoonsuh staff 96 Dec 06 2020 19:52 2_dir
3099766 drwxr-xr-x 3jeongwoonsuh staff 96 Dec 06 2020 19:52 1_dir

./subdir_test/2_dir:
1905934 -rw-r--r-- 1jeongwoonsuh staff 13660 Sep 29 2020 17:56 mainsample.c

./subdir_test/1_dir:
2956141 -rw-r--r-- 1jeongwoonsuh staff 119442 Nov 30 2020 23:38 for_test.png
Jeongwoonui-MacBookPro:Assignment_4 jeongwoonsuh$
```

Case 3: `./UnixLs -Ri`

Output:

▼ TERMINAL

```
Jeongwoonui-MacBookPro:Assignment_4 jeongwoonsuh$ ./UnixLs -Ri
3104742 UnixLs 3099290 makefile 3099650 subdir_test 3104741 UnixLs.o 3024161 UnixLs.h 2918678 assignment4_300.pdf 3024003 UnixLs.c

./subdir_test:
3099784 2_dir 3099766 1_dir

./subdir_test/2_dir:
1905934 mainsample.c

./subdir_test/1_dir:
2956141 for_test.png
Jeongwoonui-MacBookPro:Assignment_4 jeongwoonsuh$
```

Case 4: ./UnixLs -li

Output:

```
▼ TERMINAL
Jeongwoonui-MacBookPro:Assignment_4 jeongwoonsuh$ ./UnixLs -li
3104742 -rwxr-xr-x 1jeongwoonsuh staff 50296 Dec 06 2020 21:30 UnixLs
3099290 -rw-r--r-- 1jeongwoonsuh staff 121 Dec 06 2020 21:28 makefile
3099650 drwxr-xr-x 5jeongwoonsuh staff 160 Dec 06 2020 19:58 subdir_test
3104741 -rw-r--r-- 1jeongwoonsuh staff 5572 Dec 06 2020 21:30 UnixLs.o
3024161 -rw-r--r-- 1jeongwoonsuh staff 1111 Dec 06 2020 20:36 UnixLs.h
2918678 -rw-r--r-- 1jeongwoonsuh staff 113524 Nov 29 2020 22:17 assignment4_300.pdf
3024003 -rw-r--r-- 1jeongwoonsuh staff 7004 Dec 06 2020 21:28 UnixLs.c
Jeongwoonui-MacBookPro:Assignment_4 jeongwoonsuh$ █
```

Case 5: ./UnixLs -iR

Output:

```
▼ TERMINAL
Jeongwoonui-MacBookPro:Assignment_4 jeongwoonsuh$ ./UnixLs -iR
3104742 UnixLs 3099290 makefile 3099650 subdir_test 3104741 UnixLs.o 3024161 UnixLs.h 2918678 assignment4_300.pdf 3024003 UnixLs.c

./subdir_test:
3099784 2_dir 3099766 1_dir

./subdir_test/2_dir:
1905934 mainsample.c

./subdir_test/1_dir:
2956141 for_test.png
Jeongwoonui-MacBookPro:Assignment_4 jeongwoonsuh$ █
```

Case 6: ./UnixLs -LR

Output:

```
▼ TERMINAL
Jeongwoonui-MacBookPro:Assignment_4 jeongwoonsuh$ ./UnixLs -LR
-rwxr-xr-x 1jeongwoonsuh staff 50296 Dec 06 2020 21:30 UnixLs
-rw-r--r-- 1jeongwoonsuh staff 121 Dec 06 2020 21:28 makefile
drwxr-xr-x 5jeongwoonsuh staff 160 Dec 06 2020 19:58 subdir_test
-rw-r--r-- 1jeongwoonsuh staff 5572 Dec 06 2020 21:30 UnixLs.o
-rw-r--r-- 1jeongwoonsuh staff 1111 Dec 06 2020 20:36 UnixLs.h
-rw-r--r-- 1jeongwoonsuh staff 113524 Nov 29 2020 22:17 assignment4_300.pdf
-rw-r--r-- 1jeongwoonsuh staff 7004 Dec 06 2020 21:28 UnixLs.c

./subdir_test:
drwxr-xr-x 3jeongwoonsuh staff 96 Dec 06 2020 19:52 2_dir
drwxr-xr-x 3jeongwoonsuh staff 96 Dec 06 2020 19:52 1_dir

./subdir_test/2_dir:
-rw-r--r-- 1jeongwoonsuh staff 13660 Sep 29 2020 17:56 mainsample.c

./subdir_test/1_dir:
-rw-r--r-- 1jeongwoonsuh staff 119442 Nov 30 2020 23:38 for_test.png
Jeongwoonui-MacBookPro:Assignment_4 jeongwoonsuh$ █
```

Case 7: no options

Output:

```
▼ TERMINAL
Jeongwoonui-MacBookPro:Assignment_4 jeongwoonsuh$ ./UnixLs a
There does not exist such file or directory: a

Jeongwoonui-MacBookPro:Assignment_4 jeongwoonsuh$ ./UnixLs -a
There is no such option: a, please provide correct extension. (such as -i, -l, or -R)
Jeongwoonui-MacBookPro:Assignment_4 jeongwoonsuh$ █
```

Additional cases for outputs

Case 8: `./UnixLs -i -l`

Output:

```
▼ TERMINAL
Jeongwoonui-MacBookPro:Assignment_4 jeongwoonsuh$ ./UnixLs -i -l
3104742 -rwxr-xr-x 1jeongwoonsuh staff 50296 Dec 06 2020 21:30 UnixLs
3099290 -rw-r--r-- 1jeongwoonsuh staff 121 Dec 06 2020 21:28 makefile
3099650 drwxr-xr-x 5jeongwoonsuh staff 160 Dec 06 2020 19:58 subdir_test
3104741 -rw-r--r-- 1jeongwoonsuh staff 5572 Dec 06 2020 21:30 UnixLs.o
3024161 -rw-r--r-- 1jeongwoonsuh staff 1111 Dec 06 2020 20:36 UnixLs.h
2918678 -rw-r--r-- 1jeongwoonsuh staff 113524 Nov 29 2020 22:17 assignment4_300.pdf
3024003 -rw-r--r-- 1jeongwoonsuh staff 7004 Dec 06 2020 21:28 UnixLs.c
Jeongwoonui-MacBookPro:Assignment_4 jeongwoonsuh$
```

Case 9: `./UnixLs -R -i -l`

Output:

```
▼ TERMINAL
Jeongwoonui-MacBookPro:Assignment_4 jeongwoonsuh$ ./UnixLs -R -i -l
3104742 -rwxr-xr-x 1jeongwoonsuh staff 50296 Dec 06 2020 21:30 UnixLs
3099290 -rw-r--r-- 1jeongwoonsuh staff 121 Dec 06 2020 21:28 makefile
3099650 drwxr-xr-x 5jeongwoonsuh staff 160 Dec 06 2020 19:58 subdir_test
3104741 -rw-r--r-- 1jeongwoonsuh staff 5572 Dec 06 2020 21:30 UnixLs.o
3024161 -rw-r--r-- 1jeongwoonsuh staff 1111 Dec 06 2020 20:36 UnixLs.h
2918678 -rw-r--r-- 1jeongwoonsuh staff 113524 Nov 29 2020 22:17 assignment4_300.pdf
3024003 -rw-r--r-- 1jeongwoonsuh staff 7004 Dec 06 2020 21:28 UnixLs.c

./subdir_test:
3099784 drwxr-xr-x 3jeongwoonsuh staff 96 Dec 06 2020 19:52 2_dir
3099766 drwxr-xr-x 3jeongwoonsuh staff 96 Dec 06 2020 19:52 1_dir

./subdir_test/2_dir:
1905934 -rw-r--r-- 1jeongwoonsuh staff 13660 Sep 29 2020 17:56 mainsample.c

./subdir_test/1_dir:
2956141 -rw-r--r-- 1jeongwoonsuh staff 119442 Nov 30 2020 23:38 for_test.png
Jeongwoonui-MacBookPro:Assignment_4 jeongwoonsuh$
```

Case 10: `./UnixLs -il -R`

Output:

```
▼ TERMINAL
Jeongwoonui-MacBookPro:Assignment_4 jeongwoonsuh$ ./UnixLs -il -R
3104742 -rwxr-xr-x 1jeongwoonsuh staff 50296 Dec 06 2020 21:30 UnixLs
3099290 -rw-r--r-- 1jeongwoonsuh staff 121 Dec 06 2020 21:28 makefile
3099650 drwxr-xr-x 5jeongwoonsuh staff 160 Dec 06 2020 19:58 subdir_test
3104741 -rw-r--r-- 1jeongwoonsuh staff 5572 Dec 06 2020 21:30 UnixLs.o
3024161 -rw-r--r-- 1jeongwoonsuh staff 1111 Dec 06 2020 20:36 UnixLs.h
2918678 -rw-r--r-- 1jeongwoonsuh staff 113524 Nov 29 2020 22:17 assignment4_300.pdf
3024003 -rw-r--r-- 1jeongwoonsuh staff 7004 Dec 06 2020 21:28 UnixLs.c

./subdir_test:
3099784 drwxr-xr-x 3jeongwoonsuh staff 96 Dec 06 2020 19:52 2_dir
3099766 drwxr-xr-x 3jeongwoonsuh staff 96 Dec 06 2020 19:52 1_dir

./subdir_test/2_dir:
1905934 -rw-r--r-- 1jeongwoonsuh staff 13660 Sep 29 2020 17:56 mainsample.c

./subdir_test/1_dir:
2956141 -rw-r--r-- 1jeongwoonsuh staff 119442 Nov 30 2020 23:38 for_test.png
Jeongwoonui-MacBookPro:Assignment_4 jeongwoonsuh$
```

I have created `subdir_test` folder as sub-directory to show the sample output of `-R`