



Unix

Assignment-1

Course Name: **Unix and Shell Programming**

Problem Statement 1:

Write a Unix program that does the following:

1. Prints the number of blocks used by the file.

```
chandankumarsah@cse-HP-ProDesk-600-G3-MT:~/Desktop/test$ ls
test.txt
chandankumarsah@cse-HP-ProDesk-600-G3-MT:~/Desktop/test$ ls -ls
total 4
4 test.txt
chandankumarsah@cse-HP-ProDesk-600-G3-MT:~/Desktop/test$
```

2. Accepts a directory path as an argument.

```
chandankumarsah@cse-HP-ProDesk-600-G3-MT:~/Desktop$ #!/bin/sh
echo "Script Name: $0"
echo "First Parameter of the script is $1"
echo "The second Parameter is $2"
echo "The complete list of arguments is $@"
echo "Total Number of Parameters: $#"
```

3. Calculates the total size (in bytes) of all files in the directory and its subdirectories.

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```
chandankumarsah@cse-HP-ProDesk-600-G3-MT:~/Desktop/Demo$ du -b
11038  ./test
4328   ./migrations
25715  ./client/public
9083   ./client/src/layouts/RTL
19681  ./client/src/layouts/Admin
32860  ./client/src/layouts
1542280 ./client/src/artifacts
7681   ./client/src/components/FixedPlugin
4798   ./client/src/components/ThemWrapper
8602   ./client/src/components/Sidebar
4597   ./client/src/components/BackgroundColorWrapper
14558  ./client/src/components/Navbars
5964   ./client/src/components/Footer
50296  ./client/src/components
10471  ./client/src/assets/scss/black-dashboard-react/custom/utilities
7497   ./client/src/assets/scss/black-dashboard-react/custom/cards
6769   ./client/src/assets/scss/black-dashboard-react/custom/vendor
33889  ./client/src/assets/scss/black-dashboard-react/custom/mixins
186482 ./client/src/assets/scss/black-dashboard-react/custom
4161   ./client/src/assets/scss/black-dashboard-react/react-differences
194739 ./client/src/assets/scss/black-dashboard-react
202651 ./client/src/assets/scss
84768  ./client/src/assets/fonts
```

4. Finds the top 10 largest files in the directory and its subdirectories, sorted by size in descending order.

```
chandankumarsah@cse-HP-ProDesk-600-G3-MT:~/Desktop$ du -hsx * | sort -rh | head
-10
200M   EC
147M   ganache-2.5.4-linux-x86_64.AppImage
57M    Project
12M    Land-Registration-with-Blockchain-master
12M    Demo
11M    LandChain-mast
5.5M   Diagram
3.4M   Papers
2.0M   Amdocs
924K   The Art Of Saying NO.pdf
chandankumarsah@cse-HP-ProDesk-600-G3-MT:~/Desktop$
```

5. Displays the file name and size (in human-readable format) for each of the top 10 largest files.

```
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```