

ASSIGNMENT 6

Q. Write a shell program to sort all files stored in a given folder hierarchy, on their size.

Shell Program:

```
#!/bin/bash
```

```
if [ $# -ne 1 ]; then
```

```
    echo "Usage: $0 <directory>"
```

```
    exit 1
```

```
fi
```

```
DIR="$1"
```

```
if [ ! -d "$DIR" ]; then
```






```
    echo "Error: Directory not found!"
```

```
    exit 1
```

```
fi
```

```
echo "Sorting files by size in: $DIR"
```

```
find "$DIR" -type f -exec du -h {} + | sort -rh
```

 .vscode	14-12-2024 11:58	File folder
 contact	14-12-2024 11:58	File folder
 events	06-03-2025 14:05	File folder
 gallery2	14-12-2024 11:58	File folder
 main	14-12-2024 11:58	File folder
 sports	14-12-2024 11:58	File folder
 team	14-12-2024 11:58	File folder

```

Asus@Mrugankshak MINGW64 ~
$ chmod +x ass6.sh

Asus@Mrugankshak MINGW64 ~
$ ./ass6.sh /c/Users/Asus/Gatheringwebsite
Sorting files by size in: /c/Users/Asus/Gatheringwebsite
159M /c/Users/Asus/Gatheringwebsite/.git/objects/pack/pack-8a4602314ce29c58f750315aa74abc0ad4cefb4a.pack
18M /c/Users/Asus/Gatheringwebsite/events/img/musical_night.JPG
17M /c/Users/Asus/Gatheringwebsite/events/img/Btech_dance.JPG
16M /c/Users/Asus/Gatheringwebsite/events/img/madads.JPG
8.2M /c/Users/Asus/Gatheringwebsite/events/img/concert.JPG
8.0M /c/Users/Asus/Gatheringwebsite/events/img/avaj.JPG
7.2M /c/Users/Asus/Gatheringwebsite/events/img/img3.png
7.0M /c/Users/Asus/Gatheringwebsite/gallery2/back.jpg
7.0M /c/Users/Asus/Gatheringwebsite/contact/back.jpg
6.9M /c/Users/Asus/Gatheringwebsite/events/img/sumit_korde.JPG
6.7M /c/Users/Asus/Gatheringwebsite/team/img/ketan_jadhav.JPG
6.5M /c/Users/Asus/Gatheringwebsite/events/img/logo.png
6.0M /c/Users/Asus/Gatheringwebsite/events/img/Drama.JPG
5.5M /c/Users/Asus/Gatheringwebsite/events/img/img1.JPG
4.9M /c/Users/Asus/Gatheringwebsite/events/img/talent.JPG
4.1M /c/Users/Asus/Gatheringwebsite/team/img/gauri_takarkhede.jpg
3.4M /c/Users/Asus/Gatheringwebsite/team/img/sumit_korde.jpeg
3.3M /c/Users/Asus/Gatheringwebsite/team/img/gathering-logo.png
3.3M /c/Users/Asus/Gatheringwebsite/team/gathering-logo.png
3.3M /c/Users/Asus/Gatheringwebsite/sports/gathering-logo.png
3.3M /c/Users/Asus/Gatheringwebsite/main/img/gathering-logo.png
3.3M /c/Users/Asus/Gatheringwebsite/gallery2/gathering-logo.png
3.3M /c/Users/Asus/Gatheringwebsite/contact/gathering-logo.png
2.1M /c/Users/Asus/Gatheringwebsite/events/img/banner/banner.png
2.0M /c/Users/Asus/Gatheringwebsite/main/img/blog/learn_about_bg.png
1.4M /c/Users/Asus/Gatheringwebsite/team/img/saniya_sutar.jpg
1.3M /c/Users/Asus/Gatheringwebsite/gallery2/img/gathering_sports/1.webp
1.3M /c/Users/Asus/Gatheringwebsite/events/img/banner/bradcam_1.png
964K /c/Users/Asus/Gatheringwebsite/gallery2/img/gathering_sports/5.webp
832K /c/Users/Asus/Gatheringwebsite/gallery2/img/gathering_sports/4.webp
772K /c/Users/Asus/Gatheringwebsite/main/img/banner/bradcam_bg.png
748K /c/Users/Asus/Gatheringwebsite/gallery2/img/gathering_sports/8.webp
716K /c/Users/Asus/Gatheringwebsite/gallery2/img/gathering_sports/9.webp
700K /c/Users/Asus/Gatheringwebsite/gallery2/img/gathering_sports/6.webp
696K /c/Users/Asus/Gatheringwebsite/events/img/gallery/5.png
688K /c/Users/Asus/Gatheringwebsite/team/img/vidyesh_vakharkar.jpg
676K /c/Users/Asus/Gatheringwebsite/main/img/banner/banner_1.png
640K /c/Users/Asus/Gatheringwebsite/team/img/anuj_kanade.jpg
640K /c/Users/Asus/Gatheringwebsite/main/img/about/about.png
616K /c/Users/Asus/Gatheringwebsite/events/img/gallery/6.png
584K /c/Users/Asus/Gatheringwebsite/gallery2/img/gathering_sports/3.webp
576K /c/Users/Asus/Gatheringwebsite/events/img/gallery/2.png

```

```

4.0K /c/Users/Asus/Gatheringwebsite/events/img/svg/icon/2.svg
4.0K /c/Users/Asus/Gatheringwebsite/events/img/svg/icon/1.svg
4.0K /c/Users/Asus/Gatheringwebsite/events/fonts/flaticon.css
4.0K /c/Users/Asus/Gatheringwebsite/events/fonts/Flaticon.woff2
4.0K /c/Users/Asus/Gatheringwebsite/events/fonts/Flaticon.woff
4.0K /c/Users/Asus/Gatheringwebsite/events/fonts/Flaticon.ttf
4.0K /c/Users/Asus/Gatheringwebsite/events/fonts/Flaticon.eot
4.0K /c/Users/Asus/Gatheringwebsite/events/css/owl.carousel.min.css
4.0K /c/Users/Asus/Gatheringwebsite/events/css/nice-select.css
4.0K /c/Users/Asus/Gatheringwebsite/events/css/flaticon.css
4.0K /c/Users/Asus/Gatheringwebsite/.git/objects/pack/pack-8a4602314ce29c58f750315aa74abc0ad4cefb4a.rev
4.0K /c/Users/Asus/Gatheringwebsite/.git/hooks/update.sample
4.0K /c/Users/Asus/Gatheringwebsite/.git/hooks/sendemail-validate.sample
4.0K /c/Users/Asus/Gatheringwebsite/.git/hooks/push-to-checkout.sample
4.0K /c/Users/Asus/Gatheringwebsite/.git/hooks/prepare-commit-msg.sample
4.0K /c/Users/Asus/Gatheringwebsite/.git/hooks/pre-push.sample
4.0K /c/Users/Asus/Gatheringwebsite/.git/hooks/pre-commit.sample
4.0K /c/Users/Asus/Gatheringwebsite/.git/hooks/commit-msg.sample
1.0K /c/Users/Asus/Gatheringwebsite/team/images/mail-outline.svg
1.0K /c/Users/Asus/Gatheringwebsite/team/images/logo-instagram.svg
1.0K /c/Users/Asus/Gatheringwebsite/team/.vscode/settings.json
1.0K /c/Users/Asus/Gatheringwebsite/sports/sports.html
1.0K /c/Users/Asus/Gatheringwebsite/sports/sports.css
1.0K /c/Users/Asus/Gatheringwebsite/main/img/speakers/line.png
1.0K /c/Users/Asus/Gatheringwebsite/main/.vscode/settings.json
1.0K /c/Users/Asus/Gatheringwebsite/gallery2/readme.txt
1.0K /c/Users/Asus/Gatheringwebsite/gallery2/js/main.js
1.0K /c/Users/Asus/Gatheringwebsite/events/img/shape/shape_3.svg
1.0K /c/Users/Asus/Gatheringwebsite/events/img/shape/shape_2.svg
1.0K /c/Users/Asus/Gatheringwebsite/events/img/shape/shape_1.svg
1.0K /c/Users/Asus/Gatheringwebsite/.vscode/settings.json
1.0K /c/Users/Asus/Gatheringwebsite/.git/shallow
1.0K /c/Users/Asus/Gatheringwebsite/.git/refs/remotes/origin/HEAD
1.0K /c/Users/Asus/Gatheringwebsite/.git/refs/heads/main
1.0K /c/Users/Asus/Gatheringwebsite/.git/packed-refs
1.0K /c/Users/Asus/Gatheringwebsite/.git/logs/refs/remotes/origin/HEAD
1.0K /c/Users/Asus/Gatheringwebsite/.git/logs/refs/heads/main
1.0K /c/Users/Asus/Gatheringwebsite/.git/logs/HEAD
1.0K /c/Users/Asus/Gatheringwebsite/.git/info/exclude
1.0K /c/Users/Asus/Gatheringwebsite/.git/hooks/pre-receive.sample
1.0K /c/Users/Asus/Gatheringwebsite/.git/hooks/pre-merge-commit.sample
1.0K /c/Users/Asus/Gatheringwebsite/.git/hooks/pre-applypatch.sample
1.0K /c/Users/Asus/Gatheringwebsite/.git/hooks/post-update.sample
1.0K /c/Users/Asus/Gatheringwebsite/.git/hooks/applypatch-msg.sample
1.0K /c/Users/Asus/Gatheringwebsite/.git/description
1.0K /c/Users/Asus/Gatheringwebsite/.git/config
1.0K /c/Users/Asus/Gatheringwebsite/.git/HEAD
0 /c/Users/Asus/Gatheringwebsite/main/css/theme-default.css

```

Conclusion:

This demonstrates how to efficiently list and sort all files in a given directory (including subdirectories) based on their size. By using shell scripting, we automate the process of retrieving file sizes and sorting them in descending order.