

```

varun@DESKTOP-9EE2GC: /n  + ~
#1/bin/bash

echo "1. Currently logged users"
echo "2. Your shell directory"
echo "3. Home directory"
echo "4. OS name & version"
echo "5. Current working directory"
echo "6. Number of users logged in"
echo "7. Show all available shells in your system"
echo "8. Hard disk information"
echo "9. CPU information"
echo "10. Memory information"
echo "11. File system information"
echo "12. Currently running process"

read -p "Enter the option: " choice

case $choice in
1) who;;
2) echo "Your shell directory is $SHELL";;
3) echo "Your home directory is $HOME";;
4) uname -a;;
5) echo "Your current working directory is $PWD";;
6) who | wc -l;;
7) cat /etc/shells;;
8) df -h;;
9) lscpu;;
10) free -m;;
11) df -T;;
12) ps -ef;;
*) echo "Invalid option";;
esac

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"13_system_info.sh" [readonly] 33L, 783B
33,0-1 All

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varun@DESKTOP-9EIE2GC: /mnt/c/Users/Varun/Desktop/INFOBELL/CDAC-Batch-2-Training/Varun Garade/20-04-2023$ ./13_system_info.sh
1. Currently logged users
2. Your shell directory
3. Home directory
4. OS name & version
5. Current working directory
6. Number of users logged in
7. Show all available shells in your system
8. Hard disk information
9. CPU information
10. Memory information
11. File system information
12. Currently running process
Enter the option: 5
Your current working directory is /mnt/c/Users/Varun/Desktop/INFOBELL/CDAC-Batch-2-Training/Varun Garade/20-04-2023
varun@DESKTOP-9EIE2GC: /mnt/c/Users/Varun/Desktop/INFOBELL/CDAC-Batch-2-Training/Varun Garade/20-04-2023$ |

```























```
varun@DESKTOP-9E1E2GC: /n X + v
varun@DESKTOP-9E1E2GC:/mnt/c/Users/Varun/Desktop/INFOBELL/CDAC-Batch-2-Training/Varun Garade/20-04-2023$ ./27_output_ls.sh /mnt/c/Users/Varun/Desktop/INFOBELL/CDAC-Batch-2-Training/Varun Garade/20-04-2023
Contents of directory /mnt/c/Users/Varun/Desktop/INFOBELL/CDAC-Batch-2-Training/Varun Garade/20-04-2023:
total 420
-rwxrwxrwx 1 varun varun 783 Apr 19 23:10 13_system_info.sh
-rwxrwxrwx 1 varun varun 517 Apr 20 00:17 15_cur_dir.sh
-rwxrwxrwx 1 varun varun 571 Apr 19 23:47 16_rename_album.sh
-rwxrwxrwx 1 varun varun 326 Apr 19 23:59 17_print_lines.sh
-rwxrwxrwx 1 varun varun 279 Apr 20 00:06 19_delete_display_swap.sh
-rwxrwxrwx 1 varun varun 549 Apr 20 00:29 21_say_hello.sh
-rwxrwxrwx 1 varun varun 549 Apr 20 00:34 22_upper_lower.sh
-rwxrwxrwx 1 varun varun 273 Apr 20 00:44 23_print_fifth_line.sh
-rwxrwxrwx 1 varun varun 71 Apr 20 00:58 24_redirection.sh
-rwxrwxrwx 1 varun varun 121 Apr 20 01:08 25_recursion.sh
-rwxrwxrwx 1 varun varun 727 Apr 20 01:08 26_mounted_fs.sh
-rwxrwxrwx 1 varun varun 363 Apr 20 12:39 27_output_ls.sh
-rwxrwxrwx 1 varun varun 72 Apr 19 23:51 demo.txt
-rwxrwxrwx 1 varun varun 123894 Apr 19 23:10 'img_Image_Screenshot (77).png'
-rwxrwxrwx 1 varun varun 97994 Apr 19 23:11 'img_Image_Screenshot (78).png'
-rwxrwxrwx 1 varun varun 88167 Apr 19 23:23 'img_Image_Screenshot (79).png'
-rwxrwxrwx 1 varun varun 87633 Apr 19 23:30 'img_Image_Screenshot (80).png'
-rwxrwxrwx 1 varun varun 22 Apr 20 00:33 test.txt
-rwxrwxrwx 1 varun varun 35 Apr 20 00:41 test1.txt
varun@DESKTOP-9E1E2GC:/mnt/c/Users/Varun/Desktop/INFOBELL/CDAC-Batch-2-Training/Varun Garade/20-04-2023$ |
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```
varun@DESKTOP-9E1E2GC: /n X + v
#!/bin/bash

# check if there are any arguments
if [ $# -eq 0 ]; then
    echo "Error: Please provide at least one directory as argument."
    exit 1
fi

# loop through each argument and list its contents
for dir in "$@"; do
    if [ -d "$dir" ]; then
        echo "Contents of directory $dir:"
        ls -l "$dir"
    else
        echo "Error: $dir is not a directory."
    fi
done

"27_output_ls.sh" 18L, 363B
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```
varun@DESKTOP-9EIEZGC:/n X + v
#!/bin/bash

# Get list of file-systems and their disk usage in bytes
df_output=$(df -h)

# Loop through each line of the df output
while read -r line; do
    # Skip the header line
    if [[ $line == Filesystem* ]]; then
        continue
    fi

    # Extract the file-system name, used space, and available space in bytes
    fs=$(echo "$line" | awk '{print $1}')
    used=$(echo "$line" | awk '{print $2}')
    available=$(echo "$line" | awk '{print $4}')

    # Convert used and available space to percentage
    used_percentage=$(echo "scale=2; $used * 100 / ($used + $available)" | bc)
    available_percentage=$(echo "scale=2; $available * 100 / ($used + $available)" | bc)

    # Check if the available space is less than 10%
    if (( available_percentage < 10 )); then
        echo "File-system $fs has less than 10% free space available."
    fi
done << "$df_output"

"29_free_space.sh" 27L, 849B 28,85 All
```



```
varun@DESKTOP-9EIEZGC:/n X + v
varun@DESKTOP-9EIEZGC:/mnt/c/Users/Varun/Desktop/INFOBELL/CDAC-Batch-2-Training/Varun Garade/28-04-2023$ ./29_free_space.sh
(standard_in) 1: syntax error
(standard_in) 1: syntax error
(standard_in) 1: syntax error
File-system /dev/sdb has less than 10% free space available.
(standard_in) 1: syntax error
(standard_in) 1: syntax error
(standard_in) 1: syntax error
File-system none has less than 10% free space available.
(standard_in) 1: syntax error
(standard_in) 1: syntax error
(standard_in) 1: syntax error
File-system tools has less than 10% free space available.
(standard_in) 1: syntax error
(standard_in) 1: syntax error
(standard_in) 1: syntax error
File-system none has less than 10% free space available.
(standard_in) 1: syntax error
(standard_in) 1: syntax error
(standard_in) 1: syntax error
File-system none has less than 10% free space available.
(standard_in) 1: syntax error
(standard_in) 1: syntax error
(standard_in) 1: syntax error
File-system tmpfs has less than 10% free space available.
(standard_in) 1: syntax error
(standard_in) 1: syntax error
(standard_in) 1: syntax error
File-system drivers has less than 10% free space available.
(standard_in) 1: syntax error
(standard_in) 1: syntax error
(standard_in) 1: syntax error
File-system lib has less than 10% free space available.
(standard_in) 1: syntax error
(standard_in) 1: syntax error
(standard_in) 1: syntax error
File-system drvfs has less than 10% free space available.
(standard_in) 1: syntax error
(standard_in) 1: syntax error
(standard_in) 1: syntax error
File-system drvfs has less than 10% free space available.
varun@DESKTOP-9EIEZGC:/mnt/c/Users/Varun/Desktop/INFOBELL/CDAC-Batch-2-Training/Varun Garade/28-04-2023$
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```
varun@DESKTOP-9EIE2GC: /n X + v
#!/bin/bash

# Get the lower and upper bounds from command line arguments
lower=$1
upper=$2

# Initialize a counter for the number of users
count=0

# Loop through each line of the /etc/passwd file
while read -r line; do
    # Extract the user ID from the line
    uid=$(echo "$line" | awk -F: '{print $3}')

    # Check if the user ID is within the specified range
    if [[ $uid -ge $lower && $uid -le $upper ]]; then
        # Increment the user count if the user ID is within the range
        ((count++))
    fi
done < /etc/passwd

# Print the total count of users within the specified range
echo "Total count of user ID between $lower to $upper is : $count"

"30_print_user_ids.sh" 24L, 649B 24,0-1 All
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```
varun@DESKTOP-9EIE2GC: /n X + v
varun@DESKTOP-9EIE2GC:/mnt/c/Users/Varun/Desktop/INFOBELL/CDAC-Batch-2-Training/Varun Garade/20-04-2023$ vi 30_print_user_ids.sh
varun@DESKTOP-9EIE2GC:/mnt/c/Users/Varun/Desktop/INFOBELL/CDAC-Batch-2-Training/Varun Garade/20-04-2023$ ./30_print_user_ids.sh 500 1000
Total count of user ID between 500 to 1000 is : 1
varun@DESKTOP-9EIE2GC:/mnt/c/Users/Varun/Desktop/INFOBELL/CDAC-Batch-2-Training/Varun Garade/20-04-2023$ |
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```
varun@DESKTOP-9EIEZGC: /n X + v
varun@DESKTOP-9EIEZGC:/mnt/c/Users/Varun/Desktop/INFOBELL/CDAC-Batch-2-Training/Varun Garade/28-04-2023$ vi 30_print_user_ids.sh
varun@DESKTOP-9EIEZGC:/mnt/c/Users/Varun/Desktop/INFOBELL/CDAC-Batch-2-Training/Varun Garade/28-04-2023$ ./30_print_user_ids.sh 500 1000
Total count of user ID between 500 to 1000 is : 1
varun@DESKTOP-9EIEZGC:/mnt/c/Users/Varun/Desktop/INFOBELL/CDAC-Batch-2-Training/Varun Garade/28-04-2023$ vi 30_print_user_ids.sh
varun@DESKTOP-9EIEZGC:/mnt/c/Users/Varun/Desktop/INFOBELL/CDAC-Batch-2-Training/Varun Garade/28-04-2023$ vi 31_executable_path.sh
varun@DESKTOP-9EIEZGC:/mnt/c/Users/Varun/Desktop/INFOBELL/CDAC-Batch-2-Training/Varun Garade/28-04-2023$ ./31_executable_path.sh
/usr/local/sbin : 0
/usr/local/bin : 0
/usr/sbin : 137
/usr/bin : 647
/sbin : 0
/bin : 0
/usr/games : 0
/usr/local/games : 0
/usr/lib/ssl/Lib : 3
/mnt/c/Program Files (x86)/Common Files/Oracle/Java/javapath : 0
/mnt/c/WINDOWS/system32 : 4658
/mnt/c/WINDOWS : 27
/mnt/c/WINDOWS/System32/wbem : 376
/mnt/c/WINDOWS/System32/WindowsPowerShell/v1.0/ : 21
/mnt/c/WINDOWS/System32/OpenSSH/ : 7
/mnt/c/Program Files/nodejs/ : 10
/mnt/c/Program Files/Git/cmd : 7
/mnt/c/Program Files/Git/bin : 3
/mnt/c/Program Files/Java/jdk1.8.0_201/bin : 54
/mnt/c/Program Files/Docker/Docker/resources/bin : 12
/mnt/c/Program Files/MySQL/MySQL Shell 8.0/bin/ : 8
/mnt/c/Users/Varun/AppData/Local/Microsoft/WindowsApps : 20
/mnt/c/Users/Varun/AppData/Roaming/npm : 0
/mnt/c/Users/Varun/AppData/Local/Programs/Microsoft VS Code/bin : 3
/snap/bin : 0
varun@DESKTOP-9EIEZGC:/mnt/c/Users/Varun/Desktop/INFOBELL/CDAC-Batch-2-Training/Varun Garade/28-04-2023$ |
```

```
varun@DESKTOP-9EIEZGC: /n X + v
#!/bin/bash

# Split the $PATH variable into an array
IFS=' ' read -ra dirs <<< "$PATH"

# Loop through each directory in the array
for dir in "${dirs[@]}; do
    # Check if the directory exists
    if [[ -d "$dir" ]]; then
        # Count the number of executable files in the directory
        count=$(find "$dir" -maxdepth 1 -type f -executable | wc -l)

        # Print the directory path and the count of executable files
        echo "$dir : $count"
    fi
done

"31_executable_path.sh" 17L, 452B

17,0-1 All
```







