

- Bash Script 1- q1_system_info.sh

Showing Time and Date

```
=====
SYSTEM INFORMATION REPORT
=====

Report Generated On: Tue Feb 24 18:00:00 UTC 2026

Hostname: DESKTOP-EG3AVVU
Operating System: Ubuntu 24.04.3 LTS
Kernel Version: 6.6.87.2-microsoft-standard-wsl2
System Uptime: up 54 minutes
CPU Information:
Model name: Intel(R) Core(TM) i3-3217U CPU @ 1.80GHz
Memory Usage:
total        used        free      shared  buff/cache   available
Mem:       1.8Gi     460Mi    902Mi      3.5Mi    564Mi     1.4Gi
Swap:      1.0Gi        0B     1.0Gi
Disk Usage (Root Partition):
Filesystem  Size  Used Avail Use% Mounted on
/dev/sdd    1007G  1.8G  954G   1% /
Top 5 CPU Consuming Processes:
PID COMMAND      %CPU
619 unattended-upgr 64.3
2023 ps          55.5
1931 unattended-upgr 21.1
2000 q1_system_info. 4.8
1 systemd        0.3
===== END OF REPORT =====
```

CPU Details

Regular

```
ivyashree_@DESKTOP-EG3AVVU:~/bash_assignment$ lscpu | grep "Model name"
Model name: Intel(R) Core(TM) i3-3217U CPU @ 1.80GHz
```

with Modification

```
CPU Information:
Intel(R) Core(TM) i3-3217U CPU @ 1.80GHz
```

- Bash Script 2- q2_file_manager.sh

1: Create Directory

```
Enter your choice (1-6): 1
Enter directory name: assesment
Directory created successfully.

=====
FILE MANAGER MENU
=====
1. Create Directory
2. Create File
3. List Files
4. Rename File
5. Delete File
6. Exit
=====
Enter your choice (1-6): 3
Files in current directory:
total 16K
-rw-r--r-- 1 ivyashree_ ivyashree_ 983 Feb 24 18:23 README.md
drwxr-xr-x 2 ivyashree_ ivyashree_ 4.0K Feb 24 18:50 assesment
-rwxr-xr-x 1 ivyashree_ ivyashree_ 1.1K Feb 24 18:06 q1_system_info.sh
-rwxr-xr-x 1 ivyashree_ ivyashree_ 2.1K Feb 24 18:47 q2_file_manager.sh
```

2: Create File

```
Enter your choice (1-6): 2
Enter file name: cybersecurity
File created successfully.

=====
FILE MANAGER MENU
=====
1. Create Directory
2. Create File
3. List Files
4. Rename File
5. Delete File
6. Exit
=====
Enter your choice (1-6): 3
Files in current directory:
total 16K
-rw-r--r-- 1 ivyashree_ ivyashree_ 983 Feb 24 18:23 README.md
drwxr-xr-x 2 ivyashree_ ivyashree_ 4.0K Feb 24 18:50 assesment
-rw-r--r-- 1 ivyashree_ ivyashree_ 0 Feb 24 18:53 cybersecurity
-rwxr-xr-x 1 ivyashree_ ivyashree_ 1.1K Feb 24 18:06 q1_system_info.sh
-rwxr-xr-x 1 ivyashree_ ivyashree_ 2.1K Feb 24 18:47 q2_file_manager.sh
```

3: List files

```
ivyashree_@DESKTOP-EG3AVVU:~/bash_assignment$ ./q2_file_manager.sh
=====
FILE MANAGER MENU
=====
1. Create Directory
2. Create File
3. List Files
4. Rename File
5. Delete File
6. Exit
=====
Enter your choice (1-6): 3
Files in current directory:
total 12K
-rw-r--r-- 1 ivyashree_ ivyashree_ 983 Feb 24 18:23 README.md
-rwxr-xr-x 1 ivyashree_ ivyashree_ 1.1K Feb 24 18:06 q1_system_info.sh
-rwxr-xr-x 1 ivyashree_ ivyashree_ 2.1K Feb 24 18:47 q2_file_manager.sh
=====
FILE MANAGER MENU
=====
1. Create Directory
2. Create File
3. List Files
4. Rename File
5. Delete File
6. Exit
=====
```

4: Rename Files

```
Enter your choice (1-6): 4
Enter current file name: cybersecurity
Enter new file name: BASH WORK
File renamed successfully.

=====
FILE MANAGER MENU
=====
1. Create Directory
2. Create File
3. List Files
4. Rename File
5. Delete File
6. Exit
=====
Enter your choice (1-6): 3
Files in current directory:
total 16K
-rw-r--r-- 1 ivyashree_ ivyashree_ 0 Feb 24 18:53 'BASH WORK'
-rw-r--r-- 1 ivyashree_ ivyashree_ 983 Feb 24 18:23 README.md
drwxr-xr-x 2 ivyashree_ ivyashree_ 4.0K Feb 24 18:50 assesment
-rwxr-xr-x 1 ivyashree_ ivyashree_ 1.1K Feb 24 18:06 q1_system_info.sh
-rwxr-xr-x 1 ivyashree_ ivyashree_ 2.1K Feb 24 18:47 q2_file_manager.sh
```

- Bash Script 3- q3_log_analyzer.sh

Output:

```
ivyashree_@DESKTOP-EG3AVVU:~/bash_assignment$ nano q3_log_analyzer.sh
ivyashree_@DESKTOP-EG3AVVU:~/bash_assignment$ ./q3_log_analyzer.sh
Enter log file name: sample.log
=====
LOG ANALYSIS REPORT
=====
Analysis Date & Time : Wed Feb 25 02:58:21 UTC 2026
File Size           : 4.0K
Total Lines         : 6
ERROR Entries      : 3
WARNING Entries    : 2

Top 5 Frequent Words:
  3 Error:
  2 Warning:
  1 usage
  1 started
  1 not

=====
END OF REPORT
=====
```

- Bash Script 4- q4_backup.sh

Output:

```
ivyashree_@DESKTOP-EG3AVVU:~/bash_assignment$ nano q4_backup.sh
ivyashree_@DESKTOP-EG3AVVU:~/bash_assignment$ chmod +x q4_backup.sh
ivyashree_@DESKTOP-EG3AVVU:~/bash_assignment$ mkdir testfolder
touch testfolder/file1.txt
touch testfolder/file2.txt
ivyashree_@DESKTOP-EG3AVVU:~/bash_assignment$ ./q4_backup.sh
Enter directory to backup: testfolder
=====
Backup Successful!
Backup Location: backups/testfolder_backup_20260225_030600.tar.gz
=====
ivyashree_@DESKTOP-EG3AVVU:~/bash_assignment$ ls backups
testfolder_backup_20260225_030600.tar.gz
```

- Bash Script 5- q5_user_report.sh

Output:

```
=====
USER ACCOUNT REPORT
=====
Report Generated On: Wed Feb 25 07:49:42 UTC 2026

Total System Users : 28

Currently Logged-in Users:
ivyashree_ pts/1      2026-02-25 07:43

Users with /bin/bash shell: 2

First 10 Users in System:
root
daemon
bin
sys
sync
games
man
lp
mail
news

Last 5 Login Records:
reboot system boot 6.6.87.2-microso Wed Feb 25 07:43 still running
reboot system boot 6.6.87.2-microso Wed Feb 25 02:50 still running
reboot system boot 6.6.87.2-microso Tue Feb 24 19:20 - 19:28 (00:08)
reboot system boot 6.6.87.2-microso Tue Feb 24 16:54 - 19:28 (02:33)
reboot system boot 6.6.87.2-microso Sun Feb  8 07:42 - 05:04 (21:22)

=====
END OF REPORT
=====
```