

- 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 19:28 - 19:28 (00:00)
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
=====
```