

q1_system_info.sh

```
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 =====
```

time and date

```
=====
                SYSTEM INFORMATION REPORT
=====
Report Generated On: Tue Feb 24 18:00:00 UTC 2026
```

CPU

normal

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

Editor

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

q2_file_manager.sh

```
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
=====
```

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

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

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
```

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
=====
```

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
```