

1. Write a shell script to generate mark- sheet of a student. Take 3 subjects, calculate and display total marks, percentage and class obtained by the student.

Display calendar of current month

```
Windows PowerShell
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PS C:\Users\SHIBAN NANDI>
PS C:\Users\SHIBAN NANDI> $m1 = Read-Host "Enter marks for Subject 1"
Enter marks for Subject 1: 15
PS C:\Users\SHIBAN NANDI> $m2 = Read-Host "Enter marks for Subject 2"
Enter marks for Subject 2: 46
PS C:\Users\SHIBAN NANDI> $m3 = Read-Host "Enter marks for Subject 3"
Enter marks for Subject 3: 68
PS C:\Users\SHIBAN NANDI>
PS C:\Users\SHIBAN NANDI> $total = [int]$m1 + [int]$m2 + [int]$m3
PS C:\Users\SHIBAN NANDI> $per = $total / 3
PS C:\Users\SHIBAN NANDI>
PS C:\Users\SHIBAN NANDI> Write-Host "Total Marks: $total"
Total Marks: 129
PS C:\Users\SHIBAN NANDI> Write-Host "Percentage: $per %per %"
Percentage: 43 %per %
PS C:\Users\SHIBAN NANDI> if ($per -ge 70) {
>>     "Class: Distinction"
>> } elseif ($per -ge 60) {
>>     "Class: First Class"
>> } elseif ($per -ge 50) {
>>     "Class: Second Class"
>> } else {
>>     "Class: Fail"
>> }
Class: Fail
PS C:\Users\SHIBAN NANDI>
```

2. Write a menu driven shell script which will print the following menu and execute the given task.
- Display calendar of current month

```
C:\Users\SHIBAN NANDI>
C:\Users\SHIBAN NANDI>echo 1. Display Current Month/Date
1. Display Current Month/Date

C:\Users\SHIBAN NANDI>echo 2. Display Today's Time
2. Display Today's Time

C:\Users\SHIBAN NANDI>echo 3. Display Current User
3. Display Current User

C:\Users\SHIBAN NANDI>echo 4. Display Terminal Name
4. Display Terminal Name

C:\Users\SHIBAN NANDI>echo 5. Exit
5. Exit

C:\Users\SHIBAN NANDI>
C:\Users\SHIBAN NANDI>set /p ch="Enter your choice (1-5): "
Enter your choice (1-5): 1

C:\Users\SHIBAN NANDI>if "%ch%"=="1" (
More?     echo Date: %date%
More?     pause
More?     goto menu
More? )
Date: 19-01-2026
Press any key to continue . . .
```

- Display today's date and time

```
echo =====
echo SYSTEM INFORMATION MENU
echo SYSTEM INFORMATION MENU
echo =====
echo 1. Display Current Month/Date
1. Display Current Month/Date
echo 2. Display Today's Time
2. Display Today's Time
echo 3. Display Current User
3. Display Current User
echo 4. Display Terminal Name
4. Display Terminal Name
echo 5. Exit
5. Exit
echo =====
set /p ch="Enter your choice (1-5): "
Enter your choice (1-5): 2
if "%ch%"=="1" (
More?     echo Date: %date%
More?     pause
More?     goto menu
More? )
if "%ch%"=="2" (
More?     echo Time: %time%
More?     pause
More?     goto menu
More? )
Time: 20:50:42.06
Press any key to continue . . .
```

- Display usernames those are currently logged in the system

```
echo =====
=====
echo  SYSTEM INFORMATION MENU
  SYSTEM INFORMATION MENU
echo =====
=====
echo 1. Display Current Month/Date
1. Display Current Month/Date
echo 2. Display Today's Time
2. Display Today's Time
echo 3. Display Current User
3. Display Current User
echo 4. Display Terminal Name
4. Display Terminal Name
echo 5. Exit
5. Exit
echo =====
=====
set /p ch="Enter your choice (1-5): "
Enter your choice (1-5): 3
if "%ch%"=="1" (
More?      echo Date: %date%
More?      pause
More?      goto menu
More? )
if "%ch%"=="2" (
More?      echo Time: %time%
More?      pause
More?      goto menu
More? )
if "%ch%"=="3" (
More?      whoami
More?      pause
More?      goto menu
More? )
```

- Display Your terminal number

```
echo =====
=====
echo  SYSTEM INFORMATION MENU
  SYSTEM INFORMATION MENU
echo =====
=====
echo 1. Display Current Month/Date
1. Display Current Month/Date
echo 2. Display Today's Time
2. Display Today's Time
echo 3. Display Current User
3. Display Current User
echo 4. Display Terminal Name
4. Display Terminal Name
echo 5. Exit
5. Exit
echo =====
=====
set /p ch="Enter your choice (1-5): "
Enter your choice (1-5): 4
if "%ch%"=="1" (
More?      echo Date: %date%
More?      pause
More?      goto menu
More? )
if "%ch%"=="2" (
More?      echo Time: %time%
More?      pause
More?      goto menu
More? )
if "%ch%"=="3" (
More?      whoami
More?      pause
More?      goto menu
More? )
if "%ch%"=="4" (
More?      echo Terminal: %computername%
More?      pause
More?      goto menu
More? )
```

3. Write a shell script which will generate first n Fibonacci numbers like: 1, 1, 2, 3, 5, 13

```
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PS C:\Users\SHIBAN NANDI>
PS C:\Users\SHIBAN NANDI> $n = Read-Host "Enter the number of terms"
Enter the number of terms: 5
PS C:\Users\SHIBAN NANDI> $a = 0
PS C:\Users\SHIBAN NANDI> $b = 1
PS C:\Users\SHIBAN NANDI> Write-Host "Fibonacci Series:"
Fibonacci Series:
PS C:\Users\SHIBAN NANDI> for ($i = 0; $i -lt $n; $i++) {
>> Write-Host -NoNewline "$a "
>> $sum = $a + $b
>> $a = $b
>> $b = $sum
>> }
0 1 1 2 3
PS C:\Users\SHIBAN NANDI> Write-Host "" # Adds a new line at the end

PS C:\Users\SHIBAN NANDI> $n = Read-Host "Enter the number of terms"
Enter the number of terms: 10
PS C:\Users\SHIBAN NANDI> $a = 0
PS C:\Users\SHIBAN NANDI> $b = 1
PS C:\Users\SHIBAN NANDI> Write-Host "Fibonacci Series:"
Fibonacci Series:
PS C:\Users\SHIBAN NANDI> for($i = 0; $i -lt $n; $i++) {
>> Write-Host -NoNewline "$a "
>> $sum = $a + $b
>> $b = $sum
>> }
0 1 1 2 3 5 8 13 21 34
PS C:\Users\SHIBAN NANDI>
```

4. Write a shell script which will accept a number b and display first n prime numbers as output

```
Windows PowerShell
PS C:\Users\SHIBAN NANDI>
PS C:\Users\SHIBAN NANDI> $n = [int](Read-Host "How many prime numbers?")
How many prime numbers?: 20
PS C:\Users\SHIBAN NANDI> $count = 0
PS C:\Users\SHIBAN NANDI> $num = 2
PS C:\Users\SHIBAN NANDI> while ($count -lt $n) {
>> $isPrime = $true
>> for ($i = 2; $i -le [math]::Sqrt($num); $i++) {
>> if ($num % $i -eq 0) {
>> $isPrime = $false
>> break
>> }
>> }
>> if ($isPrime) {
>> Write-Host -NoNewline "$num "
>> $count++
>> }
>> $num++
>> }
2 3 5 7 11 13 17 19 23 29 31 37 41 43 47 53 59 61 67 71
PS C:\Users\SHIBAN NANDI>
```

5. Write menu driven program for file handling activity

- Creation of file
- Write content in the file
- Upend file content
- Delete file content

```
PS C:\Users\SHIBAN NANDI>
PS C:\Users\SHIBAN NANDI> do {
>> Write-Host "`n1. Create File`n2. Write Content`n3. Append Content`n4. Delete Content`n5. Exit"
>> $choice = Read-Host "Select an option"
>> $filename = "test.txt"
>>
>> switch ($choice) {
>>     1 { New-Item -Path . -Name $filename -ItemType "file" }
>>     2 {$txt = Read-Host "Enter text"; $txt | Out-File $filename }
>>     3 {$txt = Read-Host "Enter text to append"; $txt | Add-Content $filename }
>>     4 {Clear-Content $filename; Write-Host "Content Deleted" }
>> }
>> } while ($choice -ne 5)
```

```
1. Create File
2. Write Content
3. Append Content
4. Delete Content
5. Exit
Select an option: 1
```

Directory: C:\Users\SHIBAN NANDI

| Mode | LastWriteTime | Length | Name |
|--------|------------------|--------|----------|
| ---- | ----- | ----- | ---- |
| -a---- | 20-01-2026 17:02 | 0 | test.txt |

```
1. Create File
2. Write Content
3. Append Content
4. Delete Content
5. Exit
Select an option: 2
Enter text: My name is Shibhan
```

```
1. Create File
2. Write Content
3. Append Content
4. Delete Content
5. Exit
Select an option: 3
Enter text to append: Hii Shibhan
```

```
1. Create File
2. Write Content
3. Append Content
4. Delete Content
5. Exit
Select an option: 4
Content Deleted
```