VCS Task

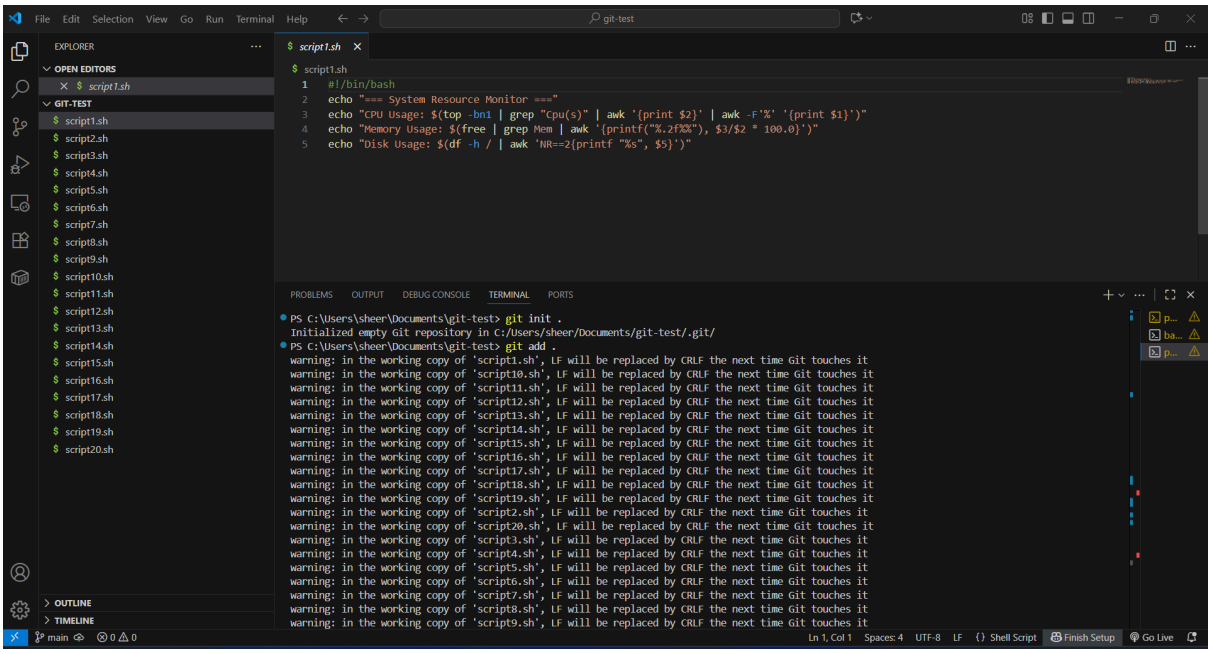
Task Description:

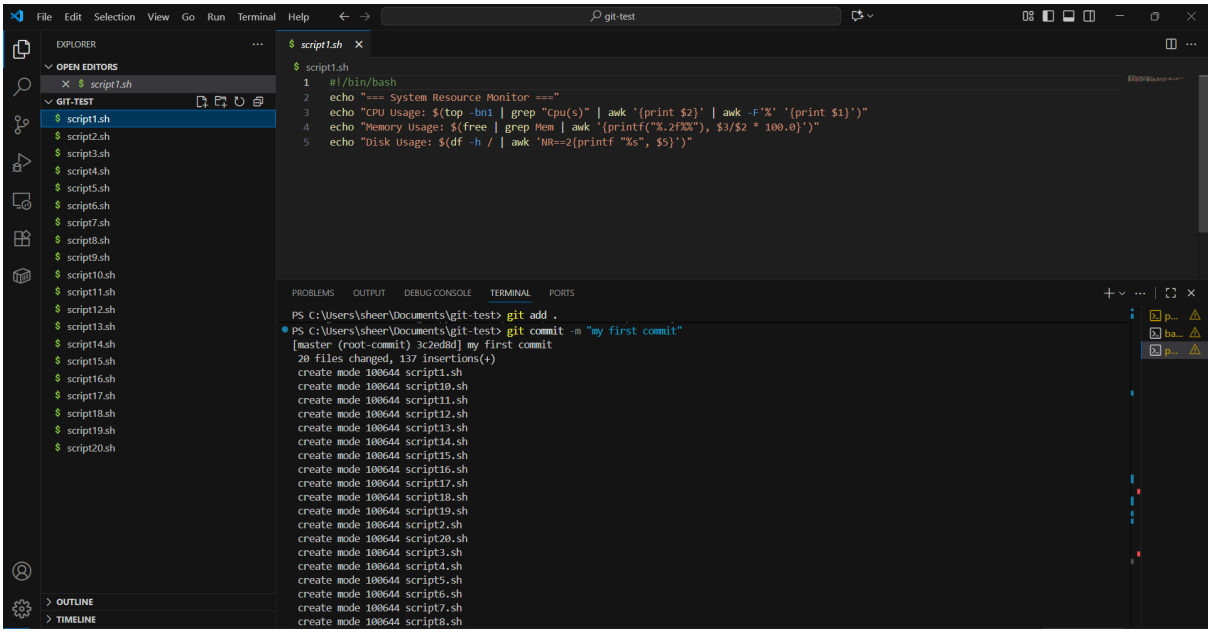
Establish a new directory, populate it with script files, initiate an empty repository on GitHub, convert the local directory into a Git repository, and link it to GitHub for pushing the code into the repository.Perform merge, rebase, stash commands in following github repo.

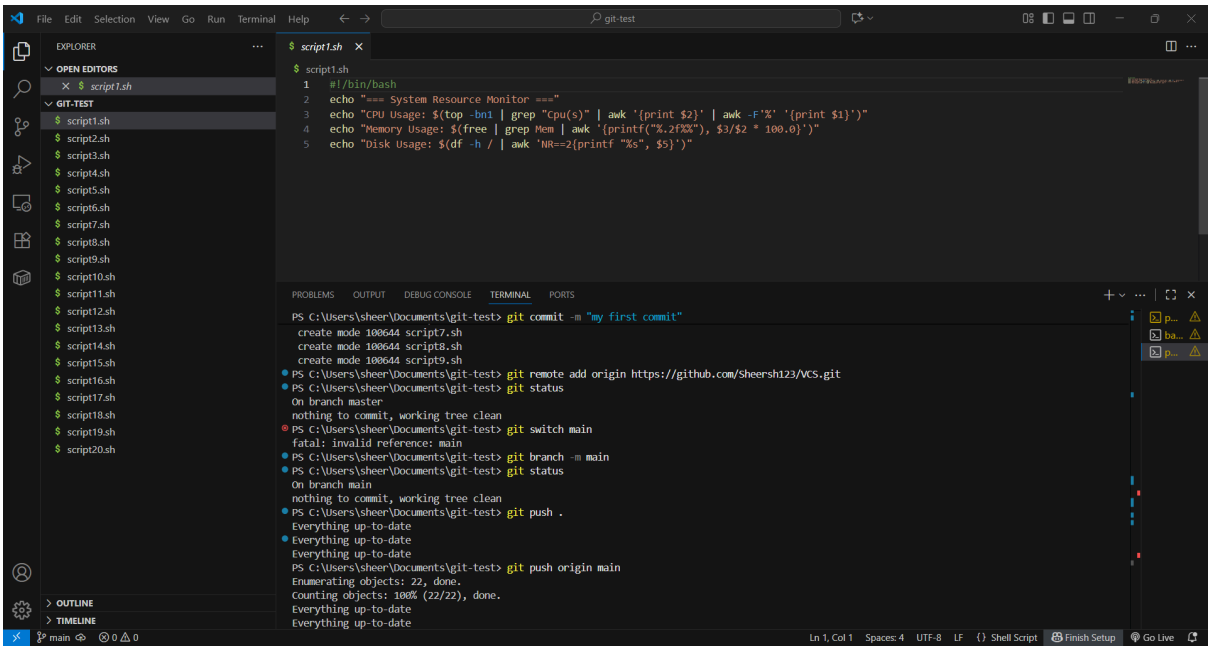
Techstacks needs to be used :

- Shell (AWS, WSL, Vbox)
- Git (Gitbash)

Setting up a GIT and Github




File Edit Selection View Go Run Terminal Help
git-test
EXPLORER
OPEN EDITORS
script1.sh
GIT-TEST
script1.sh
script2.sh
script3.sh
script4.sh
script5.sh
script6.sh
script7.sh
script8.sh
script9.sh
script10.sh
script11.sh
script12.sh
script13.sh
script14.sh
script15.sh
script16.sh
script17.sh
script18.sh
script19.sh
script20.sh
OUTLINE
TIMELINE
script1.sh
#!/bin/bash
echo "=== System Resource Monitor ==="
echo "CPU Usage: $(top -bn1 | grep "Cpu(s)" | awk '{print $2}' | awk -F'%' '{print $1}')"
echo "Memory Usage: $(free | grep Mem | awk '{printf("%.2f%%"), $3/$2 * 100.0}')"
echo "Disk Usage: $(df -h / | awk 'NR==2{printf "%s", $5}')"
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
PS C:\Users\sheer\Documents\git-test> git add .
PS C:\Users\sheer\Documents\git-test> git commit -m "my first commit"
[master (root-commit) 3c2ed8d] my first commit
20 files changed, 137 insertions(+)
create mode 100644 script1.sh
create mode 100644 script10.sh
create mode 100644 script11.sh
create mode 100644 script12.sh
create mode 100644 script13.sh
create mode 100644 script14.sh
create mode 100644 script15.sh
create mode 100644 script16.sh
create mode 100644 script17.sh
create mode 100644 script18.sh
create mode 100644 script19.sh
create mode 100644 script2.sh
create mode 100644 script20.sh
create mode 100644 script3.sh
create mode 100644 script4.sh
create mode 100644 script5.sh
create mode 100644 script6.sh
create mode 100644 script7.sh
create mode 100644 script8.sh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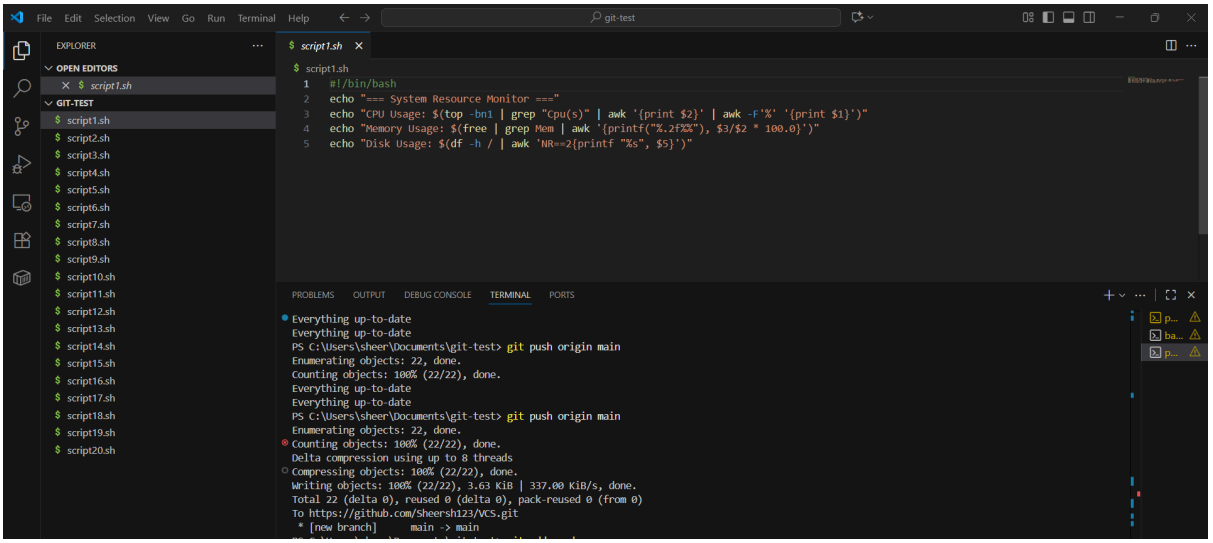
echo "Disk Usage: $(df -h / | awk 'NR==2{printf "%s", $5}')"
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
PS C:\Users\sheer\Documents\git-test> git commit -m "my first commit"
create mode 100644 script7.sh
create mode 100644 script8.sh
create mode 100644 script9.sh
PS C:\Users\sheer\Documents\git-test> git remote add origin https://github.com/Sheersh123/VCS.git
PS C:\Users\sheer\Documents\git-test> git status
On branch master
nothing to commit, working tree clean
PS C:\Users\sheer\Documents\git-test> git switch main
fatal: invalid reference: main
PS C:\Users\sheer\Documents\git-test> git branch -m main
PS C:\Users\sheer\Documents\git-test> git status
On branch main
nothing to commit, working tree clean
PS C:\Users\sheer\Documents\git-test> git push .
Everything up-to-date
Everything up-to-date
Everything up-to-date
PS C:\Users\sheer\Documents\git-test> git push origin main
Enumerating objects: 22, done.
Counting objects: 100% (22/22), done.
Everything up-to-date
Everything up-to-date
main
Ln 1, Col 1
Spaces: 4
UTF-8
LF
Shell Script
Finish Setup
Go Live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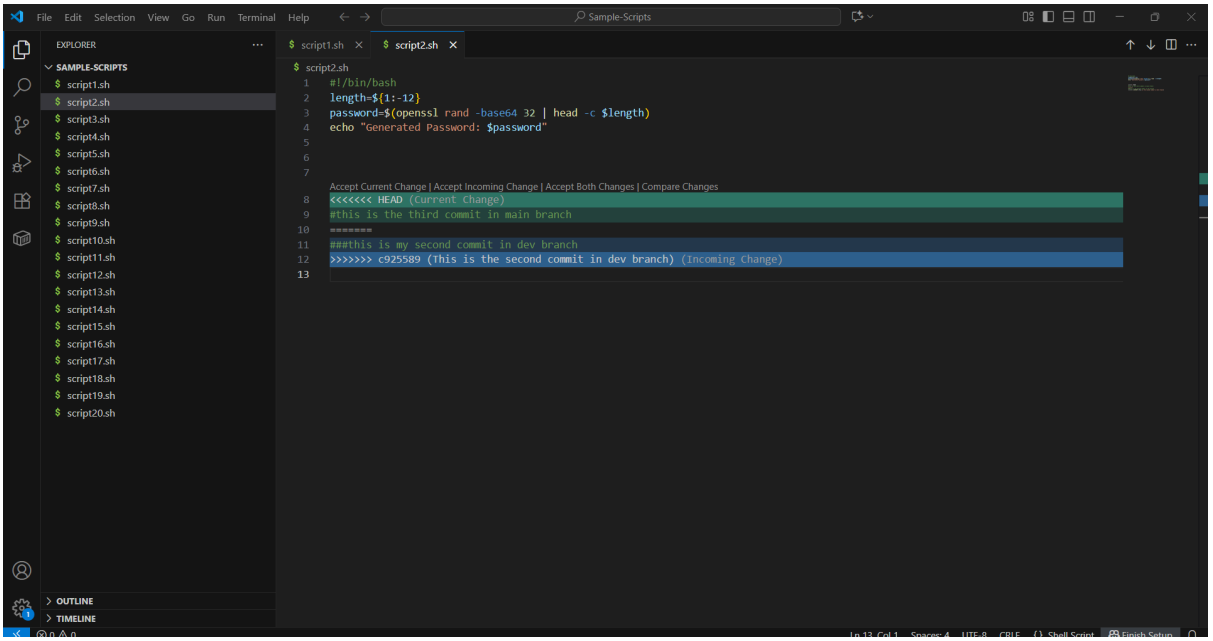
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
Everything up-to-date
Everything up-to-date
PS C:\Users\sheer\Documents\git-test> git push origin main
Enumerating objects: 22, done.
Counting objects: 100% (22/22), done.
Everything up-to-date
Everything up-to-date
PS C:\Users\sheer\Documents\git-test> git push origin main
Enumerating objects: 22, done.
Counting objects: 100% (22/22), done.
Delta compression using up to 8 threads
Compressing objects: 100% (22/22), done.
Writing objects: 100% (22/22), 3.63 KiB | 337.00 KiB/s, done.
Total 22 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To https://github.com/Sheersh123/VCS.git
* [new branch] main -> main

Git Rebase: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SAMPLE-SCRIPTS
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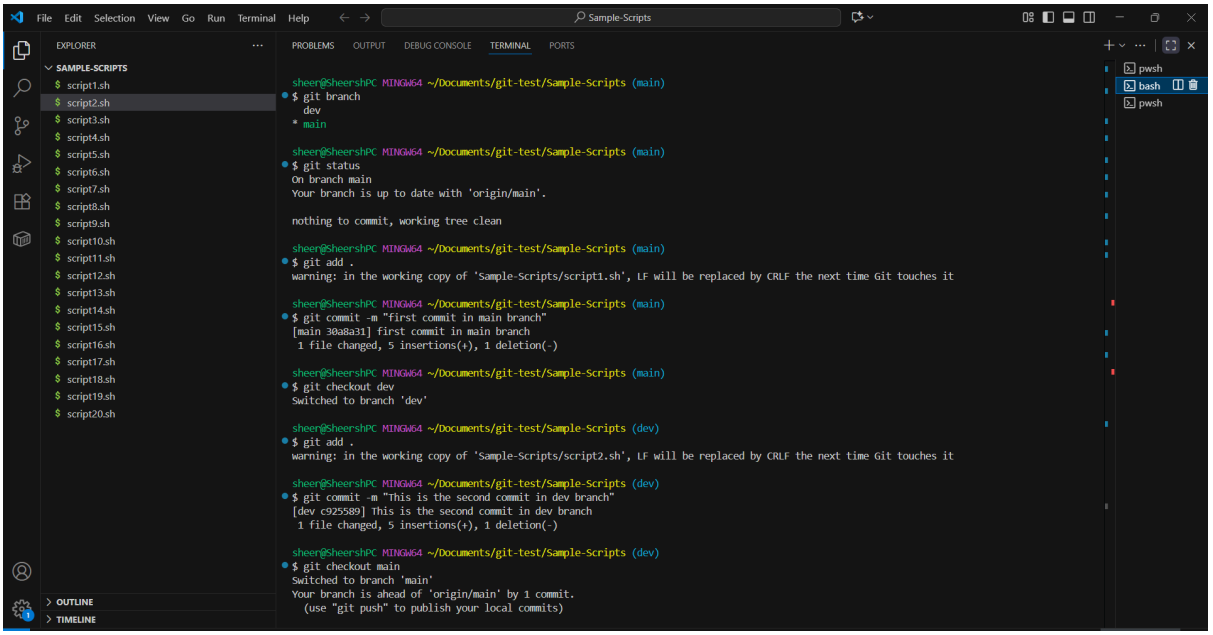
script14.sh
script15.sh
script16.sh
script17.sh
script18.sh
script19.sh
script20.sh
#!/bin/bash
length=${1:-12}
password=$(openssl rand -base64 32 | head -c $length)
echo "Generated Password: $password"
Accept Current Change | Accept Incoming Change | Accept Both Changes | Compare Changes
<<<<<<< HEAD (Current Change)
#this is the third commit in main branch
=======
###this is my second commit in dev branch
>>>>>>> c925589 (This is the second commit in dev branch) (Incoming Change)
OUTLINE
TIMELINE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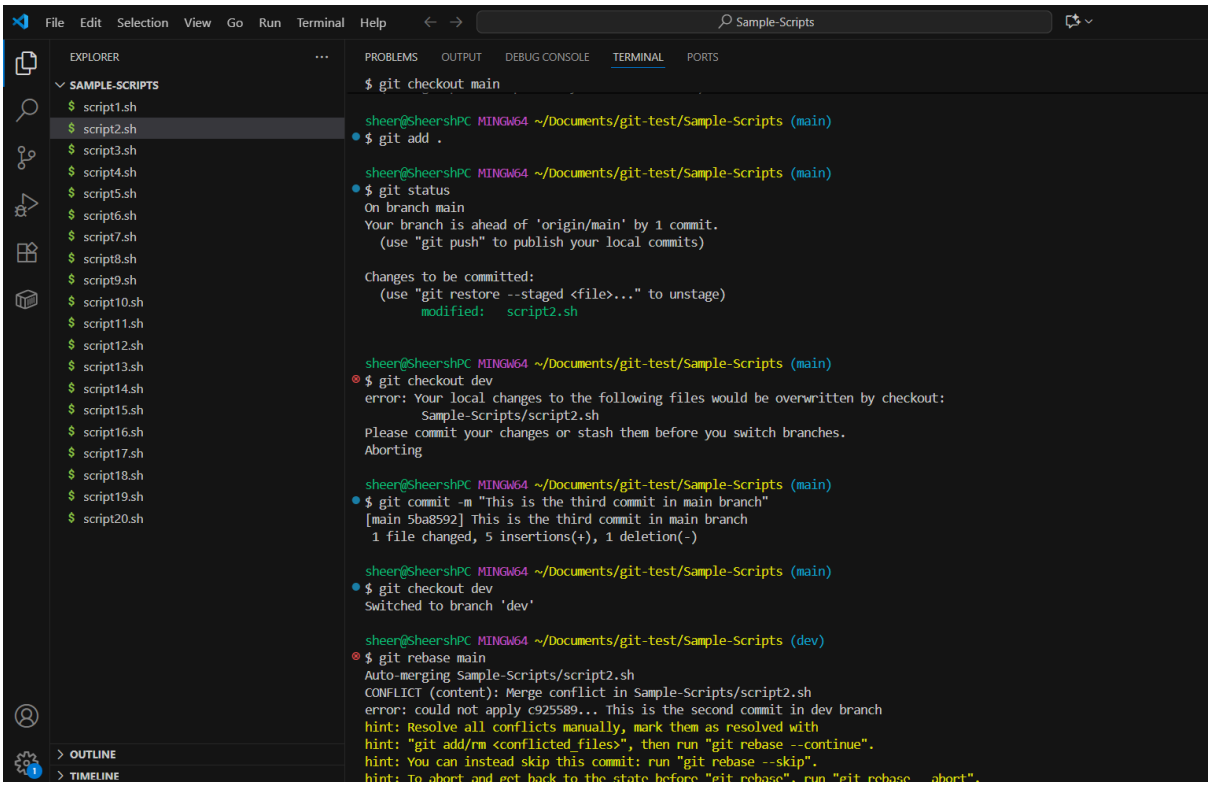
script20.sh
OUTLINE
TIMELINE
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
pwsh
bash
pwsh
sheer@SheershPC MINGW64 ~/Documents/git-test/Sample-Scripts (main)
$ git branch
dev
* main
sheer@SheershPC MINGW64 ~/Documents/git-test/Sample-Scripts (main)
$ git status
On branch main
Your branch is up to date with 'origin/main'.
nothing to commit, working tree clean
sheer@SheershPC MINGW64 ~/Documents/git-test/Sample-Scripts (main)
$ git add .
warning: in the working copy of 'Sample-Scripts/script1.sh', LF will be replaced by CRLF the next time Git touches it
sheer@SheershPC MINGW64 ~/Documents/git-test/Sample-Scripts (main)
$ git commit -m "first commit in main branch"
[main 30a8a31] first commit in main branch
1 file changed, 5 insertions(+), 1 deletion(-)
sheer@SheershPC MINGW64 ~/Documents/git-test/Sample-Scripts (main)
$ git checkout dev
Switched to branch 'dev'
sheer@SheershPC MINGW64 ~/Documents/git-test/Sample-Scripts (dev)
$ git add .
warning: in the working copy of 'Sample-Scripts/script2.sh', LF will be replaced by CRLF the next time Git touches it
sheer@SheershPC MINGW64 ~/Documents/git-test/Sample-Scripts (dev)
$ git commit -m "This is the second commit in dev branch"
[dev c925589] This is the second commit in dev branch
1 file changed, 5 insertions(+), 1 deletion(-)
sheer@SheershPC MINGW64 ~/Documents/git-test/Sample-Scripts (dev)
$ git checkout main
Switched to branch 'main'
Your branch is ahead of 'origin/main' by 1 commit.
(use "git push" to publish your local commits)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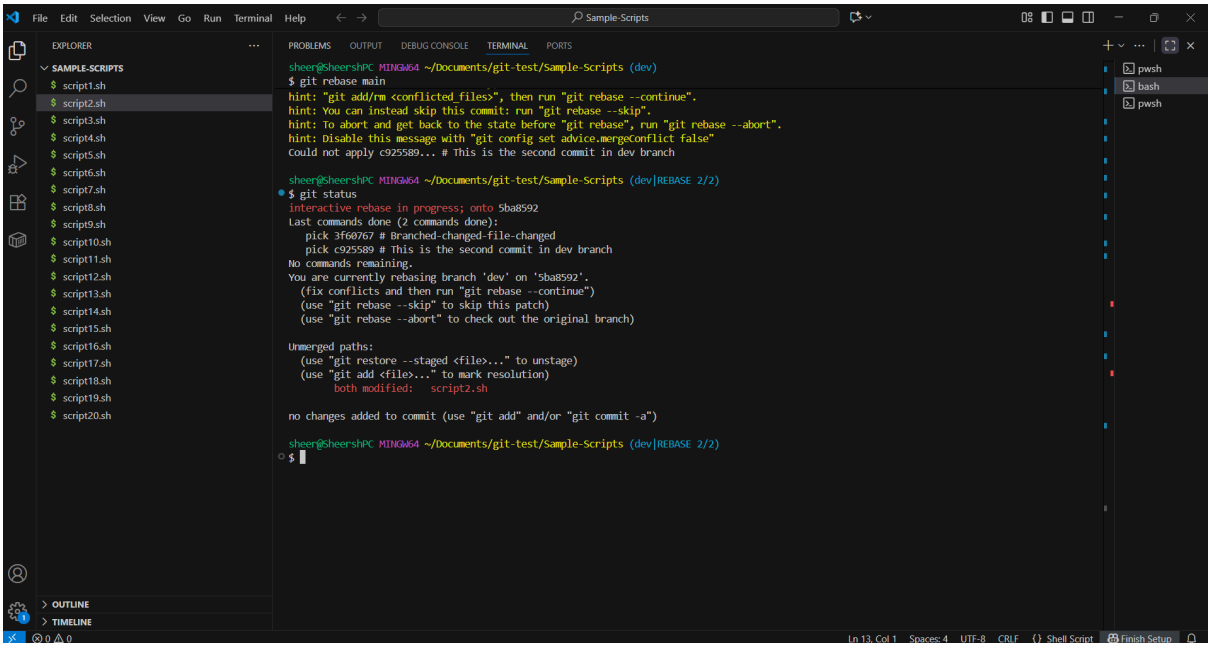
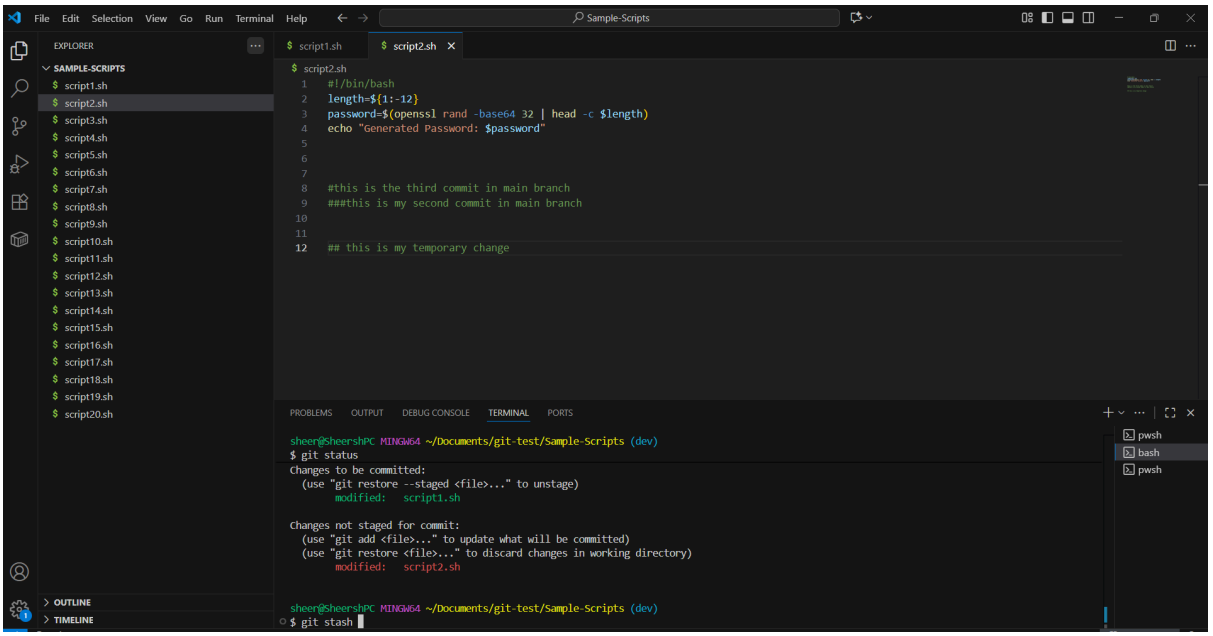
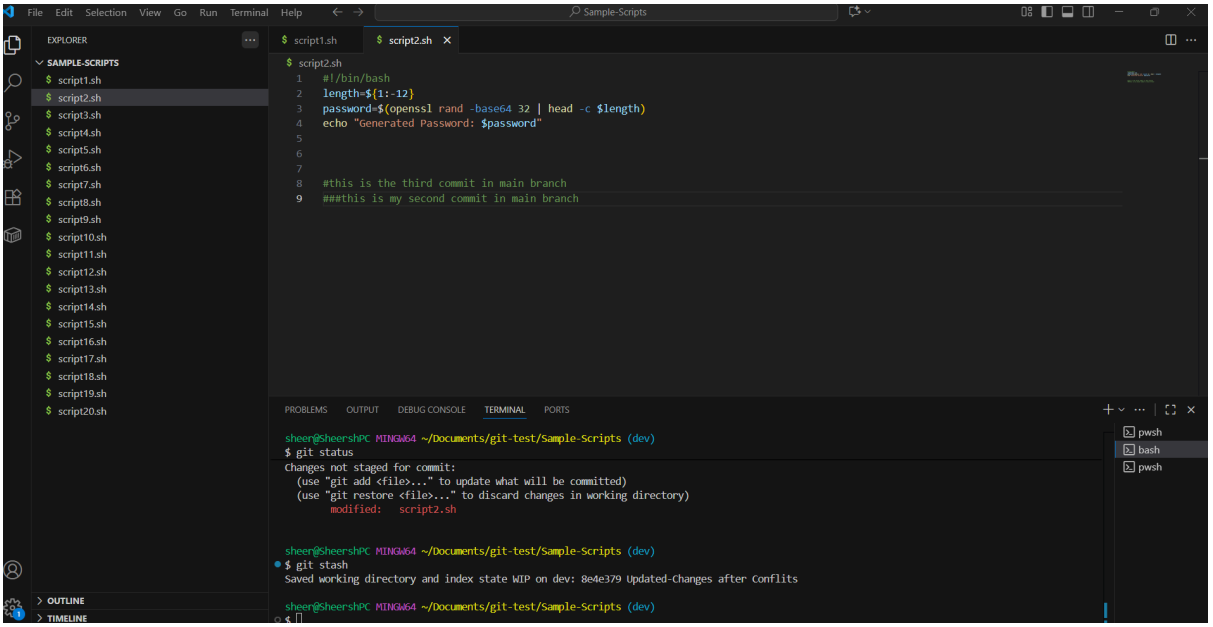
TIMELINE
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
$ git checkout main
sheer@SheershPC MINGW64 ~/Documents/git-test/Sample-Scripts (main)
$ git add .
sheer@SheershPC MINGW64 ~/Documents/git-test/Sample-Scripts (main)
$ git status
On branch main
Your branch is ahead of 'origin/main' by 1 commit.
(use "git push" to publish your local commits)
Changes to be committed:
(use "git restore --staged <file>..." to unstage)
modified: script2.sh
sheer@SheershPC MINGW64 ~/Documents/git-test/Sample-Scripts (main)
$ git checkout dev
error: Your local changes to the following files would be overwritten by checkout:
Sample-Scripts/script2.sh
Please commit your changes or stash them before you switch branches.
Aborting
sheer@SheershPC MINGW64 ~/Documents/git-test/Sample-Scripts (main)
$ git commit -m "This is the third commit in main branch"
[main 5ba8592] This is the third commit in main branch
1 file changed, 5 insertions(+), 1 deletion(-)
sheer@SheershPC MINGW64 ~/Documents/git-test/Sample-Scripts (main)
$ git checkout dev
Switched to branch 'dev'
sheer@SheershPC MINGW64 ~/Documents/git-test/Sample-Scripts (dev)
$ git rebase main
Auto-merging Sample-Scripts/script2.sh
CONFLICT (content): Merge conflict in Sample-Scripts/script2.sh
error: could not apply c925589... This is the second commit in dev branch
hint: Resolve all conflicts manually, mark them as resolved with
hint: "git add/rm <conflicted_files>", then run "git rebase --continue".
hint: You can instead skip this commit: run "git rebase --skip".



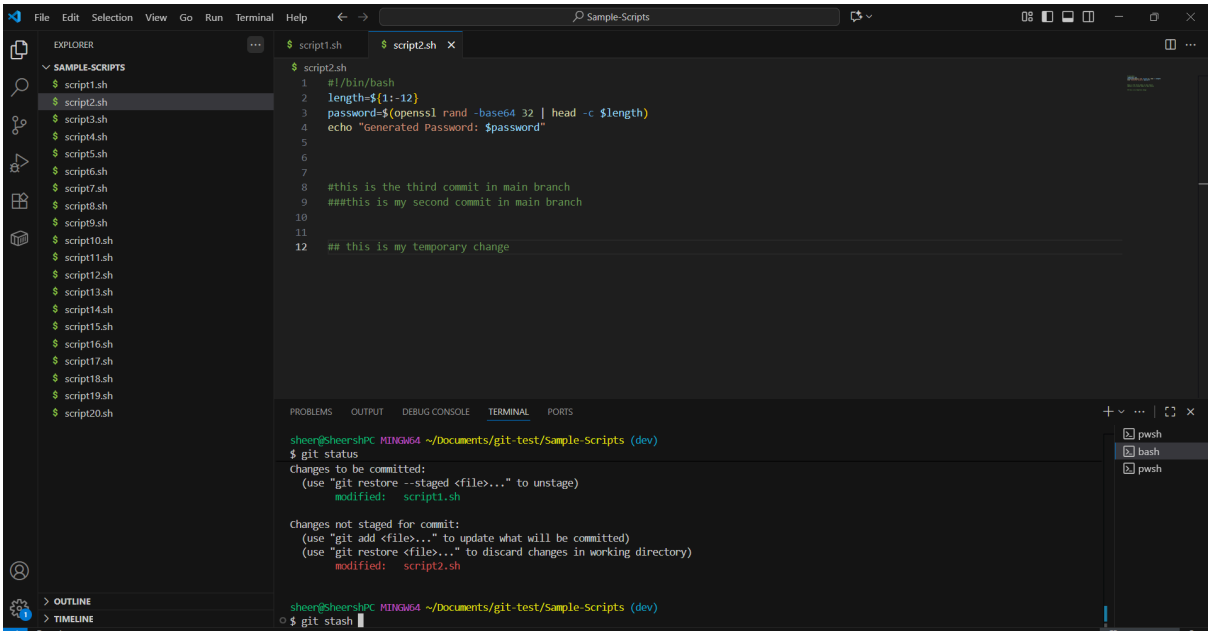

```
sheer@SheershPC MINGW64 ~/Documents/git-test/Sample-Scripts (dev|REBASE 2/2)
$ git add .

sheer@SheershPC MINGW64 ~/Documents/git-test/Sample-Scripts (dev|REBASE 2/2)
$ git rebase --continue
[detached HEAD e099a49] This is the second commit in dev branch
 1 file changed, 5 insertions(+), 1 deletion(-)
Successfully rebased and updated refs/heads/dev.
```

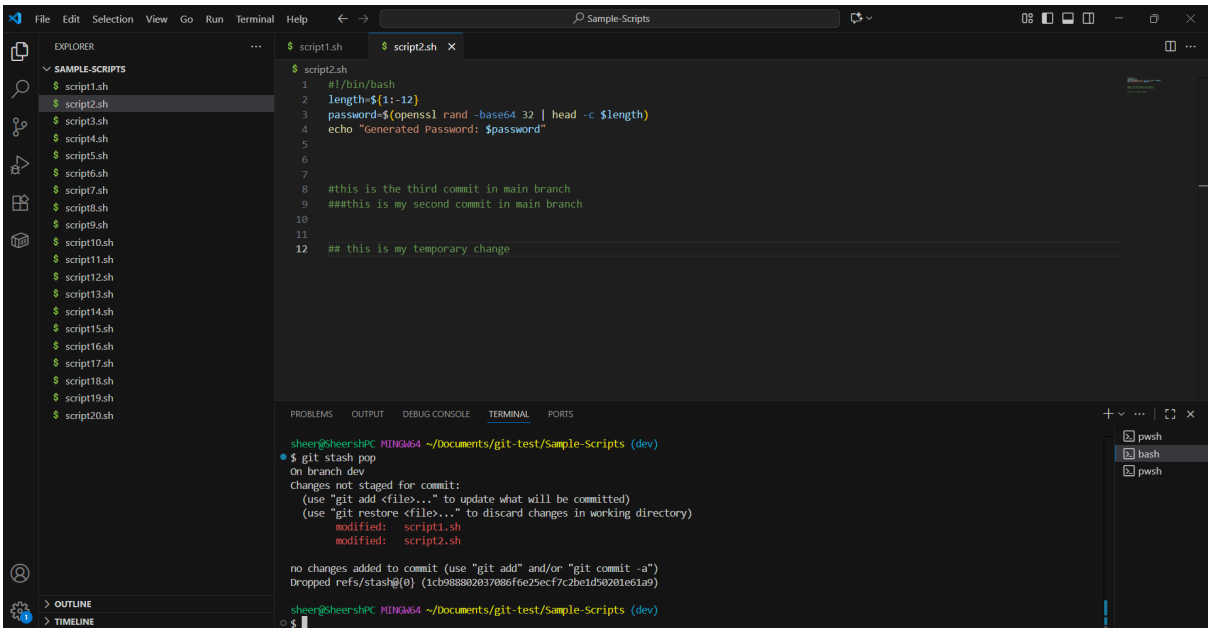
Git Stash :





Git Stash Pop:





Git merge:

```
sheer@SheershPC MINGW64 ~/Documents/git-test/Sample-Scripts (main)
$ git merge dev
Merge made by the 'ort' strategy.
 Sample-Scripts/script2.sh | 3 ++-
 1 file changed, 2 insertions(+), 1 deletion(-)
```