# Week 8 Git Hands-On Tasks

## Task 1 – Create welcome.txt and Push to GitHub

1. Navigate to the cloned repository folder:  
 cd ~/JavaFSE-DN4.0-Practice  
  
2. Create a file with a welcome message:  
 echo "Welcome to JavaFSE-DN4.0-Practice - Harshini S" > welcome.txt  
  
3. Stage and commit the file:  
 git add welcome.txt  
 git commit -m "Week 8 Task 1: Add welcome.txt"  
  
4. Push to GitHub:  
 git push origin main

## Task 2 – Configure .gitignore to Ignore Log Files

1. Create sample log files:  
 echo "sample log 1" > test1.log  
 mkdir -p log  
 echo "server log" > log/server.log  
  
2. Create or update .gitignore:  
 touch .gitignore  
 printf "%s\n" "\*.log" "log/" >> .gitignore  
  
3. Stage, commit, and push:  
 git add .gitignore  
 git commit -m "Week 8 Task 2: Add .gitignore to ignore .log files and log folder"  
 git push origin main

## Task 3 – Create and Merge New Branch

1. Create and switch to a new branch:  
 git checkout -b GitNewBranch  
  
2. Create a file in the new branch:  
 echo "This is Week 8 Task 3 file in GitNewBranch" > branchfile.txt  
 git add branchfile.txt  
 git commit -m "Add branchfile.txt in GitNewBranch"  
  
3. Merge the new branch into main:  
 git checkout main  
 git merge GitNewBranch  
 git push origin main

## Task 4 – Resolve Merge Conflict

1. Create a branch and edit hello.xml:  
 git checkout -b GitWork  
 # (Edit hello.xml with new content)  
 git add hello.xml  
 git commit -m "Updated content in GitWork branch"  
  
2. Merge into main, causing a conflict:  
 git checkout main  
 git merge GitWork  
  
3. Resolve the merge conflict by opening hello.xml in the editor, keeping final merged content, then:  
 git add hello.xml  
 git commit -m "Resolve merge conflict in hello.xml"  
  
4. Delete the branch and push:  
 git branch -d GitWork  
 git push origin main

## Task 5 – Final Cleanup and Push

1. Ensure you are on main:  
 git checkout main  
  
2. Check status and branches:  
 git status  
 git branch -a  
  
3. Pull latest changes and push:  
 git pull origin main  
 git push origin main  
  
4. Verify final state in GitHub — all Task 1–4 files and commits should be visible.