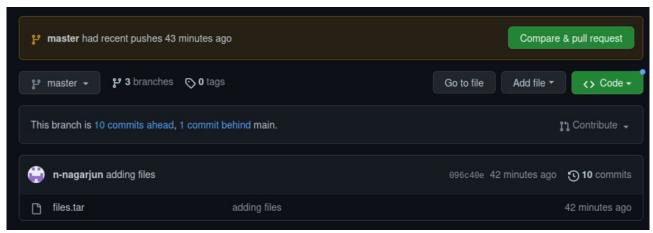1) Create a public repository in github called "guvi-task-round1" To do in your local terminal: Create a directory named "task-directory" and enter into it. Then create a shell script named 'script.sh' and when executed, your script must do the following: -> Should Create 10 files with txt extension with the word "welcome" present in all 10 files -> Get 2 variables named 'var1' & 'var2', where the values for these variables must be given by user in runtime. -> If the value of 'var1' is equal to 'var2', then entire files in the directory must be made into a single tar file and pushed to "master" branch in your repo. If the values doesn't match, then the entire files in the directory must be pushed to "develop" branch in your repo.

Script.sh

```
# create 10 files with welcome in each
for i in {1..10}; do
    echo "welcome" > welcome$i.txt
done

# get var1 and var2 from user
read -p "Enter value for a: " a
read -p "Enter value for b: " b
# compare var1 and var2
if [ "$a" == "$b" ]; then
    # create tar file
    tar -cvf files.tar *.txt
    # push to master branch
    git init
    git remote add origin git@github.com:n-nagarjun/guvi-task-round1.git
    git branch -m master
    #used this to remove the previous stagged files in the tree if we excecuted else part
    git rm -r .
    git commit
    git add files.tar
    git commit -m "pushing the tar file"
    git push -u origin master
else
    # push to develop branch
    git init
    git remote add origin git@github.com:n-nagarjun/guvi-task-round1.git
    git branch -m develop
    git rm -r .
    git commit
    git add *.txt
    git commit -m "pushing text files"
    git push -u origin develop
fi
```
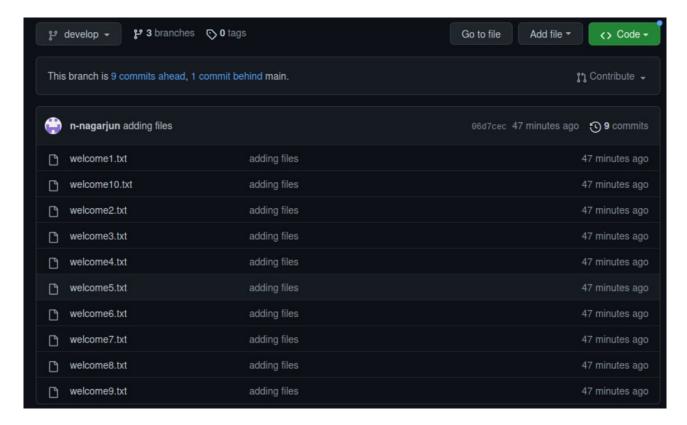
screenshots..

```
arjun@arjun-VivoBook-ASUSLaptop-X570ZD-F570ZD:~/devops/task-directory$ bash script.sh
Enter value for a: 1
Enter value for b: 1
welcome10.txt
welcome1.txt
welcome2.txt
welcome3.txt
welcome4.txt
welcome5.txt
welcome6.txt
welcome7.txt
welcome8.txt
welcome9.txt
Reinitialized existing Git repository in /home/arjun/devops/task-directory/.git/
error: remote origin already exists.
[master 72a5420] adding files
 1 file changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 files.tar
Enumerating objects: 4, done.
Counting objects: 100% (4/4), done.
Delta compression using up to 8 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 468 bytes | 468.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
To github.com:n-nagarjun/guvi-task-round1.git
   c8dda51..72a5420  master -> master
branch 'master' set up to track 'origin/master'.
arjun@arjun-VivoBook-ASUSLaptop-X570ZD-F570ZD:~/devops/task-directory$ git ls-tree -r master
100644 blob 4762ca495bdc89b9e3b1e28a71331395a77c061d      files.tar
```

master had recent pushes 43 minutes ago   Compare & pull request

master ▾   3 branches   0 tags   Go to file   Add file ▾   <> Code ▾

This branch is 10 commits ahead, 1 commit behind main.   Contribute ▾

n-nagarjun adding files   096c40e 42 minutes ago   10 commits

files.tar   adding files   42 minutes ago

2.

```
arjun@arjun-VivoBook-ASUSLaptop-X570ZD-F570ZD:~/devops/task-directory$ bash script.sh
Enter value for a: 1
Enter value for b: 2
Reinitialized existing Git repository in /home/arjun/devops/task-directory/.git/
error: remote origin already exists.
[develop dbf1717] adding files
 10 files changed, 10 insertions(+)
 create mode 100644 welcome1.txt
 create mode 100644 welcome10.txt
 create mode 100644 welcome2.txt
 create mode 100644 welcome3.txt
 create mode 100644 welcome4.txt
 create mode 100644 welcome5.txt
 create mode 100644 welcome6.txt
 create mode 100644 welcome7.txt
 create mode 100644 welcome8.txt
 create mode 100644 welcome9.txt
Enumerating objects: 4, done.
Counting objects: 100% (4/4), done.
Delta compression using up to 8 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 315 bytes | 315.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
remote:
remote: Create a pull request for 'develop' on GitHub by visiting:
remote:      https://github.com/n-nagarjun/guvi-task-round1/pull/new/develop
remote:
To github.com:n-nagarjun/guvi-task-round1.git
 * [new branch]      develop -> develop
branch 'develop' set up to track 'origin/develop'.
```

3.

2) Create 10 files and 10 directories. Create 2 new users called "guviuser" & "zenuser" Modify the permissions where, * the first 5 files & directories must have ownership as 'guviuser' with read,write,execute permissions for everyone * the last 5 files & directories must have ownership as 'zenuser' with only read permission to only the owner

script1.sh

```bash
# Create 10 directories
for i in {1..10}
do
    mkdir dir$i
done

# Create 10 files
for i in {1..10}
do
    touch file$i
done

# Create 2 new users
sudo useradd guviuser
sudo useradd zenuser

# Modify permissions for first 5 files and directories
for i in {1..5}
do
    chown guviuser:arjun dir$i file$i
    chmod 777 dir$i file$i
done

# Modify permissions for last 5 files and directories
for i in {6..10}
do
    chown zenuser:arjun dir$i file$i
    chmod 400 dir$i file$i
done
```

```
arjun@arjun-VivoBook-ASUSLaptop-X570ZD-F570ZD:~/devops/test$ sudo bash script1.sh
arjun@arjun-VivoBook-ASUSLaptop-X570ZD-F570ZD:~/devops/test$ ls -al
total 56
drwxrwxr-x 13 arjun     arjun 4096 Jan 28 01:19 .
drwxrwxr-x  5 arjun     arjun 4096 Jan 27 23:50 ..
drwxrwxrwx  2 guviuser arjun 4096 Jan 28 01:19 dir1
dr--------  2 zenuser  arjun 4096 Jan 28 01:19 dir10
drwxrwxrwx  2 guviuser arjun 4096 Jan 28 01:19 dir2
drwxrwxrwx  2 guviuser arjun 4096 Jan 28 01:19 dir3
drwxrwxrwx  2 guviuser arjun 4096 Jan 28 01:19 dir4
drwxrwxrwx  2 guviuser arjun 4096 Jan 28 01:19 dir5
dr--------  2 zenuser  arjun 4096 Jan 28 01:19 dir6
dr--------  2 zenuser  arjun 4096 Jan 28 01:19 dir7
dr--------  2 zenuser  arjun 4096 Jan 28 01:19 dir8
dr--------  2 zenuser  arjun 4096 Jan 28 01:19 dir9
-rwxrwxrwx  1 guviuser arjun    0 Jan 28 01:19 file1
-r--------  1 zenuser  arjun    0 Jan 28 01:19 file10
-rwxrwxrwx  1 guviuser arjun    0 Jan 28 01:19 file2
-rwxrwxrwx  1 guviuser arjun    0 Jan 28 01:19 file3
-rwxrwxrwx  1 guviuser arjun    0 Jan 28 01:19 file4
-rwxrwxrwx  1 guviuser arjun    0 Jan 28 01:19 file5
-r--------  1 zenuser  arjun    0 Jan 28 01:19 file6
-r--------  1 zenuser  arjun    0 Jan 28 01:19 file7
-r--------  1 zenuser  arjun    0 Jan 28 01:19 file8
-r--------  1 zenuser  arjun    0 Jan 28 01:19 file9
drwxrwxr-x  8 arjun     arjun 4096 Jan 27 21:49 .git
-rw-rw-r--  1 arjun     arjun  493 Jan 28 01:14 script1.sh
arjun@arjun-VivoBook-ASUSLaptop-X570ZD-F570ZD:~/devops/test$
```

3.Upload a file with set of linux commands to a git repo.

vi - Text editor for editing files
cat - View the contents of a file
less - View the contents of a file one page at a time
tail - View the last few lines of a file
head - View the first few lines of a file
ps - View the processes running on the system
kill - Send a signal to a process to terminate it
top - View the processes using the most system resources
free - View the amount of free and used memory on the system
df - View the amount of free and used disk space
du - View the size of a directory and its subdirectories
passwd - changes passwords for user accounts
useradd - To add user accounts to the system
groupadd - To add user groups to the system
gpasswd - To add users to the group
whoami - To see the currently logged-in user
usermod - To modify or change any attributes of a already created user account
userdel - To delete the user
ping - Test the reachability of a network host
traceroute - View the route packets take to reach a network host
netstat - View network connections and routing information
ifconfig - View and configure network interfaces
ip - to show or manipulate routing, devices, and tunnels & similar to 'ifconfig'
tracepath - To traces path to destination network address
telnet - To check the network connectivity for the system over a TCP/IP network
route - View and configure the routing table
iptables - Configure the Linux firewall
ss - View network socket information
nc - Network utility for reading and writing to network connections
dig - Query DNS servers for information
host - Query DNS servers for informatio
nslookup - Query DNS servers for information
wget - Download files from the internet
curl - Transfer data with URL syntax
rsync - Synchronize files and directories between systems
scp - Securely copy files between systems
ssh - Securely connect to a remote system
sftp - Securely transfer files between systems
ftp - Transfer files between systems
mount - Mount a file system
umount - Unmount a file system
fdisk - Partition and format storage devices
parted - Partition and format storage devices
lsof - List open files
man - To display the user manual of any command
uptime - To find out how long the system is active(running)
service - It is used starts, stop and restart a daemon or services by calling the script
shutdown - To shutdown the system in a safe way

apt-get - To install, remove, and perform other operations on installed software packages

yum - To install, remove, and perform other operations on installed software packages

zypper - To install, remove, and perform other operations on installed software packages

pwd - To view the present working directory

ls - Lists the files and directories in the current directory

cd - Changes the current directory

mkdir - Creates a new directory

rmdir - Deletes a directory

history - To view the previously executed command

wc - To find out number of lines, word count, byte and characters count in the files

touch - Creates a new file or updates the existing file

rm - Deletes a file or directory

cp - Copies a file or directorymv - Moves or renames a file or directory

chmod - Changes the permissions of a file or directory

chown - Changes the ownership of a file or directory

find - Search for files in a directory hierarchy

grep - Search for patterns in text