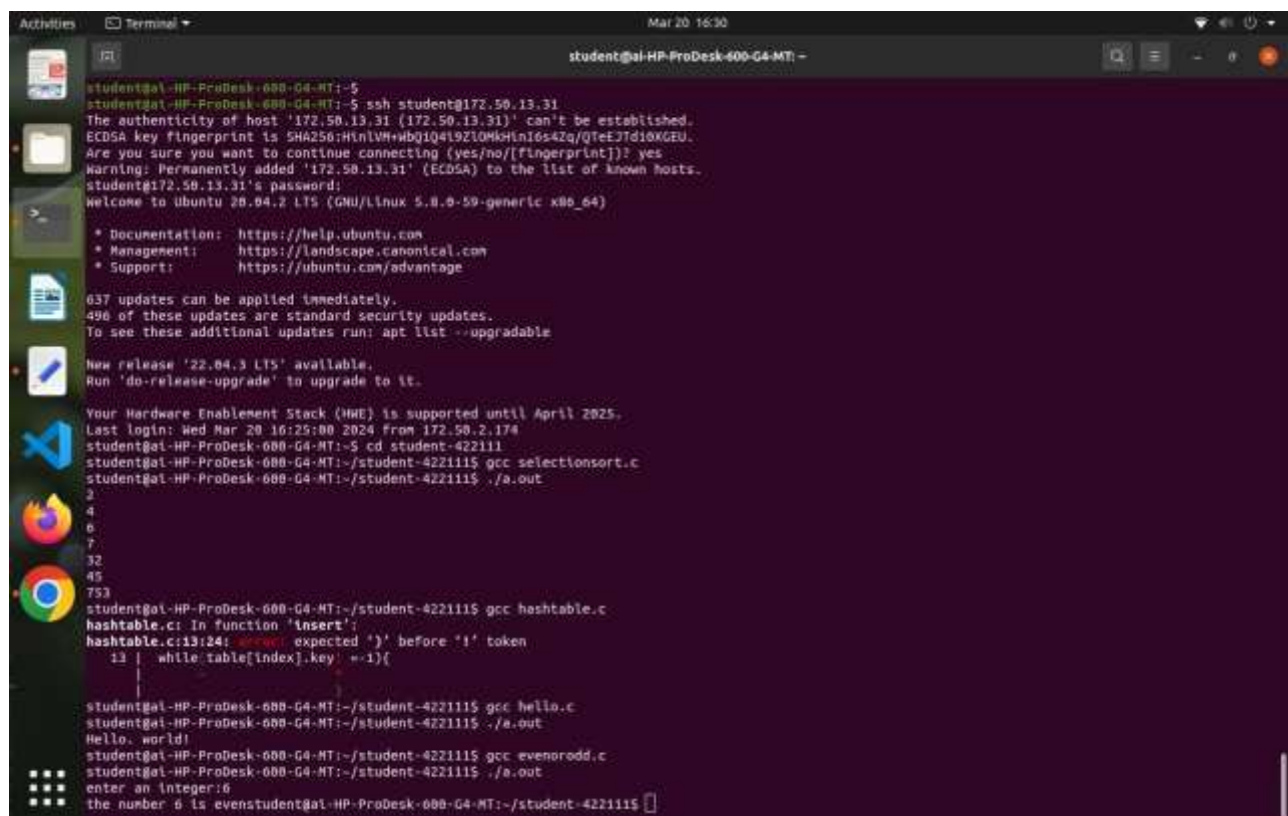


UNIX ASSIGNMENT:5 NAME:amithSai reddy SEC:A ROLL NUMBER:422108

1. Using SSH command execute the three programs on two different machines.

Code:



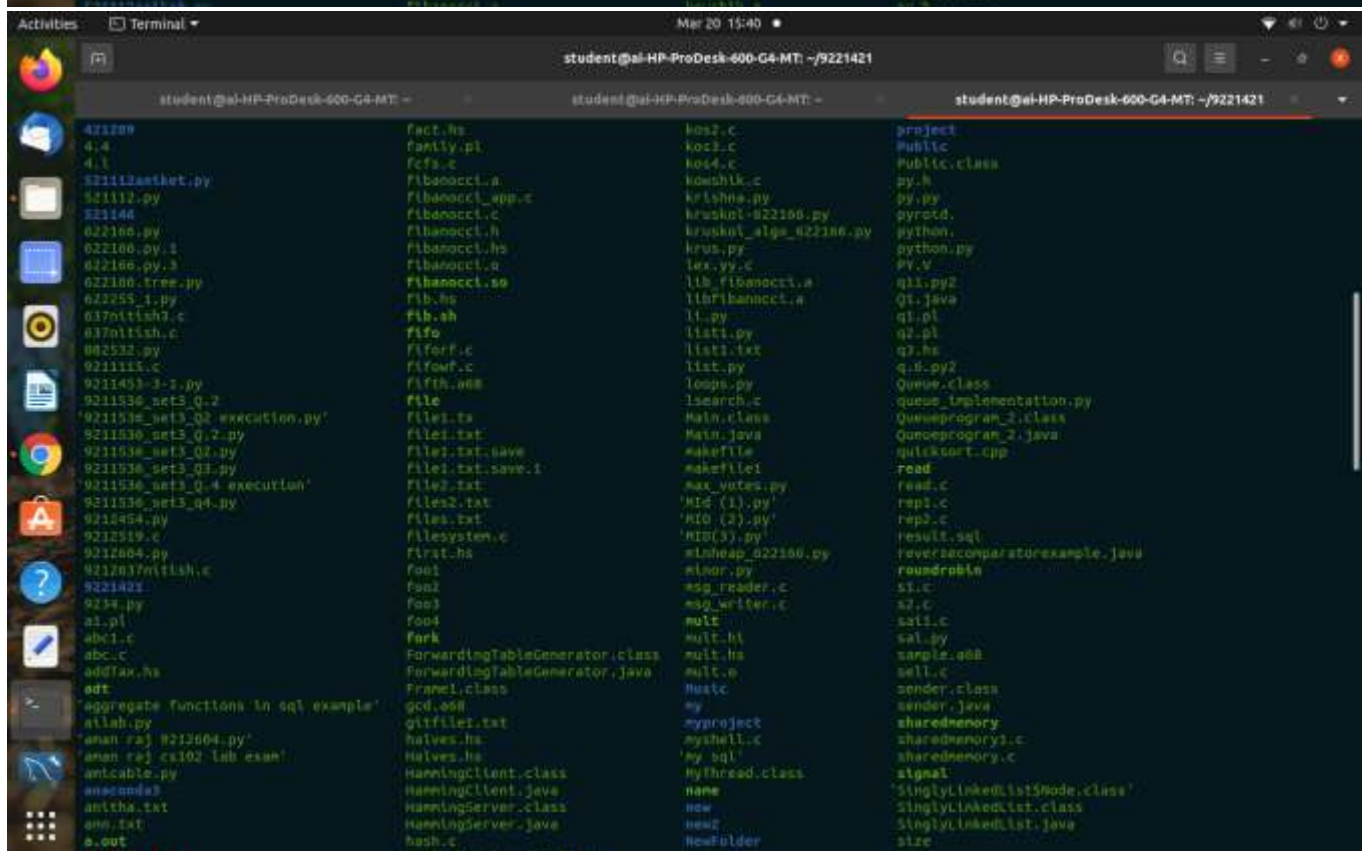
```
student@ai-HP-ProDesk-600-G4-MT:~$ ssh student@172.50.13.31
student@ai-HP-ProDesk-600-G4-MT:~$ ssh student@172.50.13.31
The authenticity of host '172.50.13.31 (172.50.13.31)' can't be established.
ECDSA key fingerprint is SHA256:HlnlVM+HbQ1q419Z10MhHln10s42q/QteE7Td10XGEU.
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added '172.50.13.31' (ECDSA) to the list of known hosts.
student@172.50.13.31's password:
Welcome to Ubuntu 20.04.2 LTS (GNU/Linux 5.8.0-59-generic x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/advantage

637 updates can be applied immediately.
496 of these updates are standard security updates.
To see these additional updates run: apt list --upgradable

New release '22.04.3 LTS' available.
Run 'do-release-upgrade' to upgrade to it.

Your Hardware Enablement Stack (HWE) is supported until April 2025.
Last login: Wed Mar 20 16:25:00 2024 from 172.50.2.174
student@ai-HP-ProDesk-600-G4-MT:~$ cd student-422111
student@ai-HP-ProDesk-600-G4-MT:~/student-422111$ gcc selectionsort.c
student@ai-HP-ProDesk-600-G4-MT:~/student-422111$ ./a.out
2
4
6
7
32
45
753
student@ai-HP-ProDesk-600-G4-MT:~/student-422111$ gcc hashtable.c
hashtable.c: In function 'insert':
hashtable.c:13:24: error: expected ')', before '!' token
   13 |     while (table[index].key != 1){
       |                        ^
student@ai-HP-ProDesk-600-G4-MT:~/student-422111$ gcc hello.c
student@ai-HP-ProDesk-600-G4-MT:~/student-422111$ ./a.out
Hello, world!
student@ai-HP-ProDesk-600-G4-MT:~/student-422111$ gcc evenorodd.c
student@ai-HP-ProDesk-600-G4-MT:~/student-422111$ ./a.out
enter an Integer:6
the number 6 is evenstudent@ai-HP-ProDesk-600-G4-MT:~/student-422111$
```




```
Activities Terminal Mar 20 15:41
student@ai-HP-ProDesk-600-G4-MT: ~/9221421

Enter the elements of the array:
2
3
11
19
29
The prime numbers in the array are: 2 3 11
student@ai-HP-ProDesk-600-G4-MT: ~/9221421 gcc palind.c
palind.c: In function 'main':
palind.c:13:16: warning: character constant too long for its type
   13 |     char str[] = "abba";
      |                ^
palind.c:13:16: warning: overflow in conversion from 'int' to 'char' changes value from '168614881' to '97' [-Woverflow]
palind.c:5:10: warning: implicit declaration of function 'strlen' [-Wimplicit-function-declaration]
     5 |     int h = strlen(str) - 1;
       |          ^~~~~~
palind.c:5:10: warning: incompatible implicit declaration of built-in function 'strlen'
palind.c:11:1: note: include <string.h> or provide a declaration of 'strlen'
+++ | #include <string.h>
    1 | int main()
palind.c:7:31: error: expected ')' before 'printf'
     7 |         if (str[i++] != str[h--])
           |                               ^
     8 |             printf("is not a palindrome\n", str);
           |             ~~~~~
palind.c:12:7: error: expected expression before ')' token
    12 |     }
       |       ^
palind.c: At top level:
palind.c:14:11: error: expected declaration specifiers or '...' before string constant
    14 |     printf("is a palindrome\n", str);
       |           ^~~~~~
palind.c:14:34: error: unknown type name 'str'
    14 |     printf("is a palindrome\n", str);
       |                                ^~~
palind.c:15:4: error: expected identifier or '(' before 'return'
    15 |     return 0;
       |     ^~~~~~
palind.c:16:1: error: expected identifier or '(' before ')' token
    16 | }
       | ^
student@ai-HP-ProDesk-600-G4-MT: ~/9221421
```

```
Activities Terminal Mar 20 16:04
student@ai-HP-ProDesk-600-G4-MT: ~/9221421

capitali file4.sh output1.txt 'Screenshot from 2024-01-19 12:21:40.png' square.sh
capo file.txt output.sh 'Screenshot from 2024-01-19 12:21:48.png' student_1.sql
department.sql file.txt output.txt 'Screenshot from 2024-01-19 12:21:53.png' student.sql
double.c hash.c palind.c 'Screenshot from 2024-01-19 12:22-01.png' sum.c
employee.sql html.html pipes.c 'Screenshot from 2024-01-19 12:22-06.png' sum_obj.c
fact.c infixtopostfix.c prime.c 'Screenshot from 2024-01-19 12:22-13.png' teacher.sql

student@ai-HP-ProDesk-600-G4-MT: ~/9221421 gcc hash.c
student@ai-HP-ProDesk-600-G4-MT: ~/9221421 ./a.out
hash table after inserting 2,20,19,95,67,13:
Slot 0 : -1
Slot 1 : 67 -1
Slot 2 : 13 2 -1
Slot 3 : -1
Slot 4 : 20 -1
Slot 5 : -1
Slot 6 : -1
Slot 7 : 95 -1
Slot 8 : 19 -1
Slot 9 : -1
Slot 10 : -1

Searching For 13 : 13 Found!
Searching For 20 : 20 Found!
Searching For 19 : 19 Found!

Hash table after deleting 19,95:
Slot 0 : -1
Slot 1 : 67 -1
Slot 2 : 2 -1
Slot 3 : -1
Slot 4 : 20 -1
Slot 5 : -1
Slot 6 : -1
Slot 7 : -1
Slot 8 : 19 -1
Slot 9 : -1
Slot 10 : -1

student@ai-HP-ProDesk-600-G4-MT: ~/9221421 gcc fibonacci.c
student@ai-HP-ProDesk-600-G4-MT: ~/9221421 ./a.out
fibonacci series upto 10:
0112358132134
student@ai-HP-ProDesk-600-G4-MT: ~/9221421
```



```
Activities Terminal Mar 20 16:27
student@ai-HP-ProDesk-600-G4-MT-
student@ai-HP-... student@ai-HP-... student@ai-HP-... student@ai-HP-... student@ai-HP-... student@ai-HP-... student@ai-HP-...
a.out CRC.py haskque12 haskque6.hs multithread.c signal.c
append.pl dbms_lab1_q1.sql haskque12.ht haskque6.o multithread.c snap
area.py dbms_lab1_q3.sql haskque12.hs haskque7 Music some.txt
assign_5 assign_5.ht haskque12.o haskque7.ht myproject son.py
assign_5.h assign_5.h haskque14 haskque7.hs names.txt son.py
assign_5.hs assign_5.h haskque14.ht haskque7.o new sqlants.txt
assign_5.o assign_5.o haskque14.h haskque8 hth.pl StartExp1.class
assign_501 assign_501.ht haskque14.o haskque8.h num.txt StartExp1.java
assign_501.hs assign_501.h haskque14.o haskque8.hs occurrence.pl state.txt
assign_501.o assign_501.o haskque15 haskque8.o occur.pl student-421115-
assign_502 eclipse haskque15.hs haskque8.palindrome.sh student-421111
assign_502.o eclipse-workspace pgifu.c student-421111-nops
assign_502.ht encap.pl pgmfu.c student-421111-n6
assign_502.hs encap.pl pgmfu.c sumfaq.sh
assign_502.o exit.c pgmfu.c sum.pl
assign_503 fact1.sh fact.pl pro1
assign_503.ht fact.powershell fact.pl Public
assign_503.hs fact.sh h12.txt __pycache__ threadtpl.java
assign_503.o fact.sh h13.txt que10.o88 THP_files
assign_504 fghfc.py h1.txt que10.o88 UNIX
assign_504.ht fibonaccl.sh h12f.py que10.o88 'Untitled Document 1'
assign_504.hs fiba.pl h12f.py que10.o88 'Untitled Folder 1'
assign_504.o fiba.pl h12f.py que10.o88 'Untitled Folder 2'
bankersalgo.c file insertlist.pl quick.pl Videos
bitstuffing.java file10.txt inserttopstfx.py quick.pl wait.c
bitstuffing.java 'File System' inserttopstfx.py quick.pl wait.c
bct22.py fork.c inserttopstfx.py quick.pl wait.c
bct234.py ForwardingTableGenerator.class inserttopstfx.py quick.pl wait.c
capital.txt ForwardingTableGenerator.java inserttopstfx.py quick.pl wait.c
capitall.txt gbnv.py inserttopstfx.py quick.pl wait.c
student@ai-HP-ProDesk-600-G4-MT-:~$ cd student-421111
student@ai-HP-ProDesk-600-G4-MT-:/student-421111$ ls
anstrongnumber.c deletenodebyiten.c 'doublyll.c' findcycle1.c insertionsort.c sumofdigits.c
a.out deletenode.c evaluatepostfix.c hashtable.c infixtopostfix.c swapwithouttemp.c
assignment-2-421111 display.c evenorodd.c hello.c insertusingpos.c swapwithtemp.c
circularll.c doublyll.c factorial.c index.html selectionsort.c traverse.c
student@ai-HP-ProDesk-600-G4-MT-:/student-421111$ gcc hello.c
student@ai-HP-ProDesk-600-G4-MT-:/student-421111$ ./a.out
Hello, world!
student@ai-HP-ProDesk-600-G4-MT-:/student-421111$ gcc evenorodd.c
student@ai-HP-ProDesk-600-G4-MT-:/student-421111$ ./a.out
enter an integer:10
the number 10 is evenstudent@ai-HP-ProDesk-600-G4-MT-:/student-421111$
```

```
Activities Terminal Mar 20 16:28
student@ai-HP-ProDesk-600-G4-MT-
student@ai-HP-... student@ai-HP-... student@ai-HP-... student@ai-HP-... student@ai-HP-... student@ai-HP-... student@ai-HP-...
assign_501.hs OS haskque15.ht haskque8.o occur.pl student-421115-
assign_501.o eclipse haskque15.hs haskque8.o palindrone.sh student-421111
assign_502 eclipse-workspace haskque15.o haskque9.h pgifu.c student-421111-nops
assign_502.ht encap.pl haskque15.hs haskque9.h pgmfu.c student-421111-n6
assign_502.hs encap.pl pgmfu.c sumfaq.sh
assign_502.o exit.c pgmfu.c sum.pl
assign_503 fact1.sh fact.pl pro1
assign_503.ht fact.powershell fact.pl Public
assign_503.hs fact.sh h12.txt __pycache__ threadtpl.java
assign_503.o fact.sh h13.txt que10.o88 THP_files
assign_504 fghfc.py h1.txt que10.o88 UNIX
assign_504.ht fibonaccl.sh h12f.py que10.o88 'Untitled Document 1'
assign_504.hs fiba.pl h12f.py que10.o88 'Untitled Folder 1'
assign_504.o fiba.pl h12f.py que10.o88 'Untitled Folder 2'
bankersalgo.c file insertlist.pl quick.pl Videos
bitstuffing.java file10.txt inserttopstfx.py quick.pl wait.c
bitstuffing.java 'File System' inserttopstfx.py quick.pl wait.c
bct22.py fork.c inserttopstfx.py quick.pl wait.c
bct234.py ForwardingTableGenerator.class inserttopstfx.py quick.pl wait.c
capital.txt ForwardingTableGenerator.java inserttopstfx.py quick.pl wait.c
capitall.txt gbnv.py inserttopstfx.py quick.pl wait.c
student@ai-HP-ProDesk-600-G4-MT-:~$ cd student-421111
student@ai-HP-ProDesk-600-G4-MT-:/student-421111$ ls
anstrongnumber.c deletenodebyiten.c 'doublyll.c' findcycle1.c insertionsort.c sumofdigits.c
a.out deletenode.c evaluatepostfix.c hashtable.c infixtopostfix.c swapwithouttemp.c
assignment-2-421111 display.c evenorodd.c hello.c insertusingpos.c swapwithtemp.c
circularll.c doublyll.c factorial.c index.html selectionsort.c traverse.c
student@ai-HP-ProDesk-600-G4-MT-:/student-421111$ gcc hello.c
student@ai-HP-ProDesk-600-G4-MT-:/student-421111$ ./a.out
Hello, world!
student@ai-HP-ProDesk-600-G4-MT-:/student-421111$ gcc evenorodd.c
student@ai-HP-ProDesk-600-G4-MT-:/student-421111$ ./a.out
enter an integer:10
the number 10 is evenstudent@ai-HP-ProDesk-600-G4-MT-:/student-421111$ gcc anstrongnumber.c
student@ai-HP-ProDesk-600-G4-MT-:/student-421111$ ./a.out
2
4
6
8
10
12
14
16
18
20
student@ai-HP-ProDesk-600-G4-MT-:/student-421111$
```

2. Create a project under CVS/git repository and record multiple versions/branches and practice merging of branches (with a batch of 2 members) using gitbash commands and upload all your previous lab tasks to this repository .

Code:

```
Activities Terminal Apr 3 16:54
student@al-HP-ProDesk-600-G4-MT: ~/Desktop/UNIX
student@al-HP-ProDesk-600-G4-MT:~$ cd Desktop
student@al-HP-ProDesk-600-G4-MT:~/Desktop$ ls
522132.py BitStuffing.java UNIX
student@al-HP-ProDesk-600-G4-MT:~/Desktop$ cd UNIX
student@al-HP-ProDesk-600-G4-MT:~/Desktop/UNIX$ git status
On branch master

No commits yet

nothing to commit (create/copy files and use "git add" to track)
student@al-HP-ProDesk-600-G4-MT:~/Desktop/UNIX$ git checkout -b "branch422148"
Switched to a new branch "branch422148"
student@al-HP-ProDesk-600-G4-MT:~/Desktop/UNIX$ git status
On branch branch422148

No commits yet

Untracked files:
  (use "git add <file>..." to include in what will be committed)
    Assignment1
    Assignment2
    Assignment3

nothing added to commit but untracked files present (use "git add" to track)
student@al-HP-ProDesk-600-G4-MT:~/Desktop/UNIX$ git add .
student@al-HP-ProDesk-600-G4-MT:~/Desktop/UNIX$ git commit -m "Added 422148 files"
[branch422148 (root-commit) e9c3c87] Added 422148 files
12 files changed, 429 insertions(+)
create mode 100644 Assignment1/awk.sh
create mode 100644 Assignment1/awk.txt
create mode 100644 Assignment1/cpio.sh
create mode 100644 Assignment1/cpio_out.txt
create mode 100644 Assignment1/sed.sh
create mode 100644 Assignment1/sed.txt
create mode 100644 Assignment1/tar.sh
create mode 100644 Assignment1/tar_out.txt
create mode 100644 Assignment3/Build_And_Run.sh
create mode 100644 Assignment3/WQueens2.txt
create mode 100644 Assignment3/unix.jpg
create mode 100644 Assignment4/UNIX ASSIGNMENT4.pdf
student@al-HP-ProDesk-600-G4-MT:~/Desktop/UNIX$ git push origin branch422148
Username for 'https://github.com': ^C
student@al-HP-ProDesk-600-G4-MT:~/Desktop/UNIX$ git remote -v
origin https://github.com/G-JOSHUA-STEPHEN/UNIX.git (fetch)
origin https://github.com/G-JOSHUA-STEPHEN/UNIX.git (push)
student@al-HP-ProDesk-600-G4-MT:~/Desktop/UNIX$ git remote set-url https://github.com/G-JOSHUA-STEPHEN/UNIX
```

```
Activities Terminal Apr 3 16:54
student@ai-HP-ProDesk-600-G4-MT: ~/Desktop/UNIX$
create mode 100644 Assignment3/unix.jpg
create mode 100644 Assignment4/UNIX ASSIGNMENT4.pdf
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/UNIX$ git push origin branch422148
Username for 'https://github.com': ^C
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/UNIX$ git remote -v
origin https://github.com/G-JOSHUA-STEPHEN/UNIX.git (fetch)
origin https://github.com/G-JOSHUA-STEPHEN/UNIX.git (push)
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/UNIX$ git remote set-url https://ghp_EXb0fEGZkuN6VxR4HS7CBu9qdsHB6q1NbeuF@github.com/G-JOSHUA-STEPHEN/UNIX.git/
usage: git remote set-url [--push] <name> <newurl> [<oldurl>]
or: git remote set-url --add <name> <newurl>
or: git remote set-url --delete <name> <url>

--push      manipulate push URLs
--add       add URL
--delete    delete URLs

student@ai-HP-ProDesk-600-G4-MT:~/Desktop/UNIX$ git remote set-url origin https://ghp_EXb0fEGZkuN6VxR4HS7CBu9qdsHB6q1NbeuF@github.com/G-JOSHUA-STEPHEN/UNIX.git/
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/UNIX$ git push origin branch422148
Enumerating objects: 17, done.
Counting objects: 100% (17/17), done.
Delta compression using up to 12 threads
Compressing objects: 100% (16/16), done.
Writing objects: 100% (17/17), 1.28 MiB | 541.00 KiB/s, done.
Total 17 (delta 1), reused 0 (delta 0)
remote: Resolving deltas: 100% (1/1), done.
To https://github.com/G-JOSHUA-STEPHEN/UNIX.git/
 * [new branch] branch422148 -> branch422148
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/UNIX$ git add .
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/UNIX$ git commit -m "Added 422148 Assignment1"
[branch422148 6728056] Added 422148 Assignment1
1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 First422180.pdf
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/UNIX$ git push origin branch422148
Enumerating objects: 4, done.
Counting objects: 100% (4/4), done.
Delta compression using up to 12 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (3/3), 486.43 KiB | 25.40 MiB/s, done.
Total 3 (delta 1), reused 0 (delta 0)
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
To https://github.com/G-JOSHUA-STEPHEN/UNIX.git/
 e9c3c87..6728056 branch422148 -> branch422148
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/UNIX$
```