CSCI-4116
Assignment 1

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B00895875

March 7, 2025

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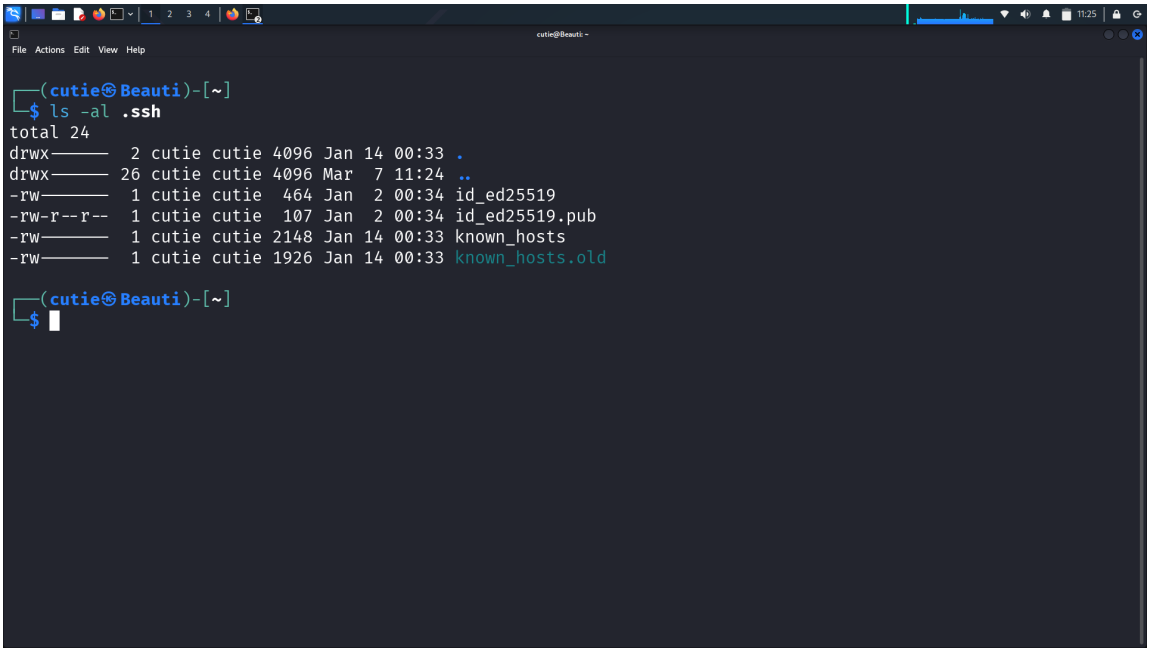
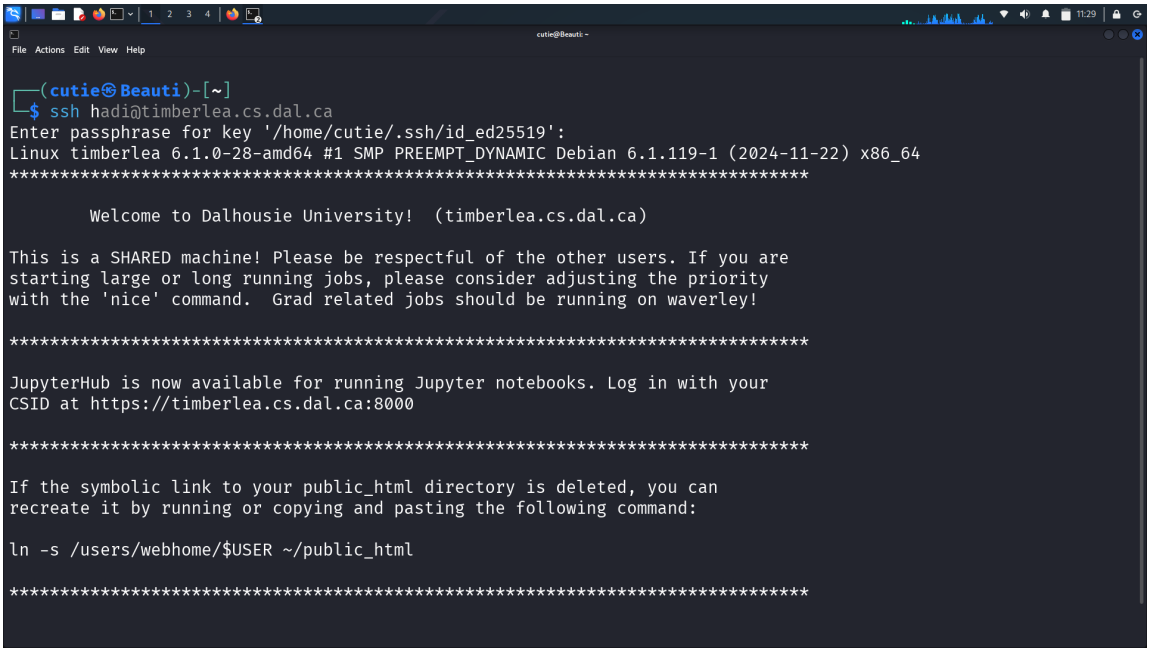
1 Exercise 1

1.1 Q1 and 2



1.2 Q3

1.3 Q4

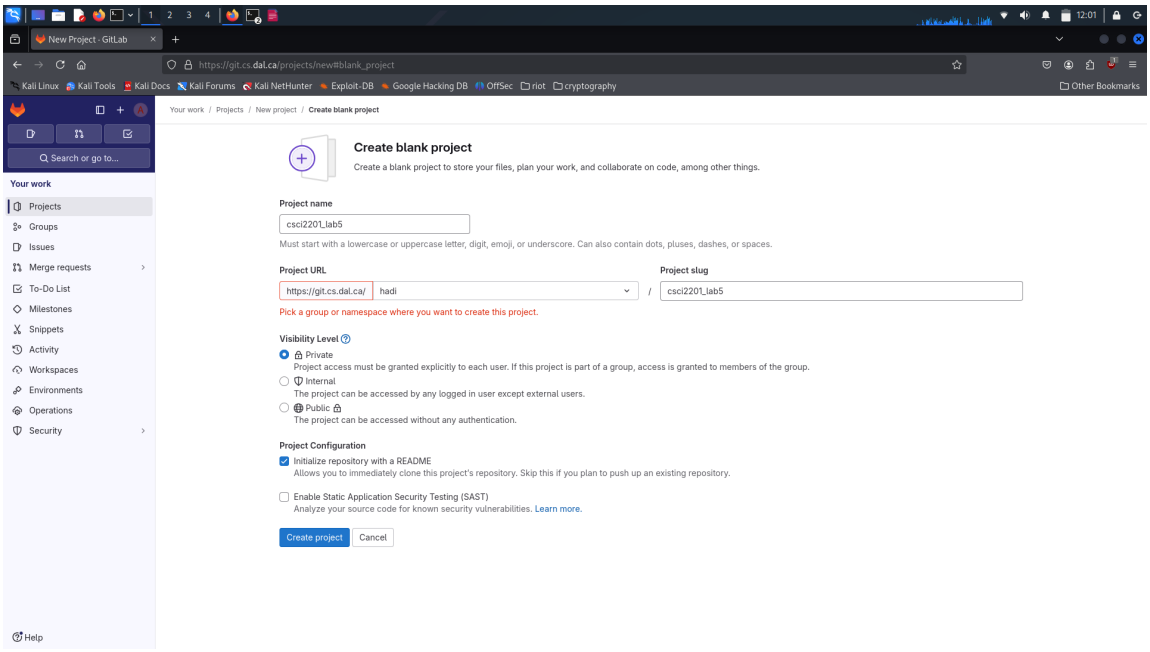


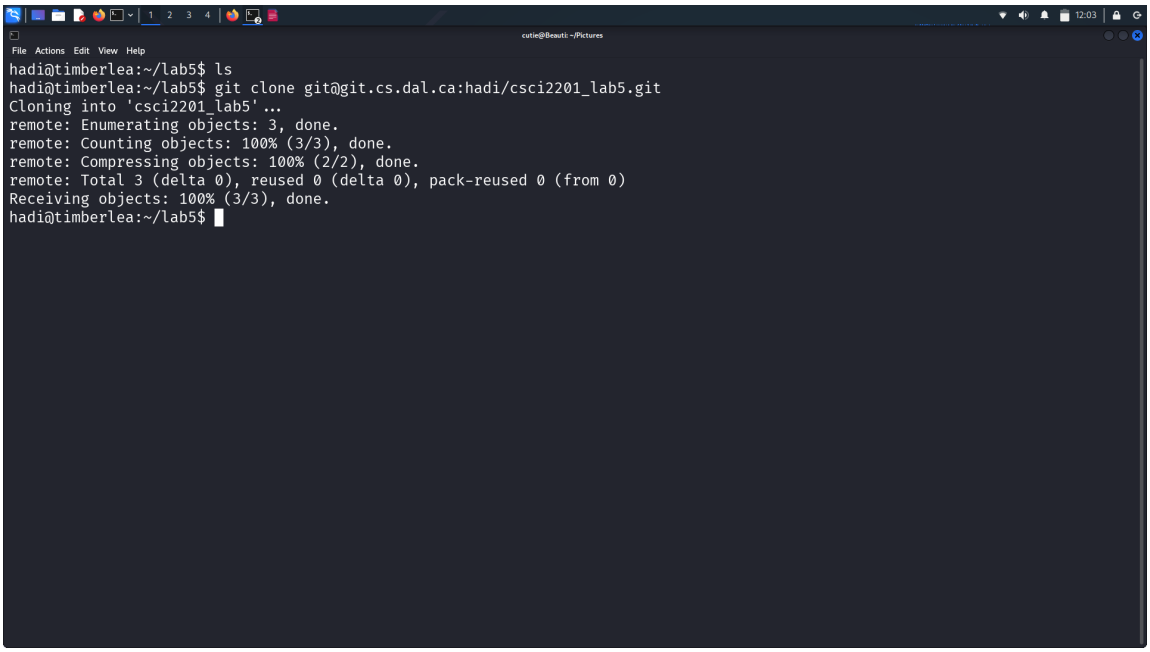
1.4 Q5

1. **Benefits:**
   - More resilient to brute force attacksas the keysize is much larger than usual passwords
   - More resilient to social engineering attacks since it is much harder to extract information about the key from the user (the only way to do so is to have the user share their private key which is easier to avoid as opposed to sharing general information that might hint to possible user created passwords)
   - Does not require the user to memorize passwords
2. **Drawback:**
   - Requires more complex/involved setup as opposed to passwords.
   - Requires key managment, since losing the key means that the user will not be able to login anymore (so a backup/key recovery mechanisim must be used in conjunction)

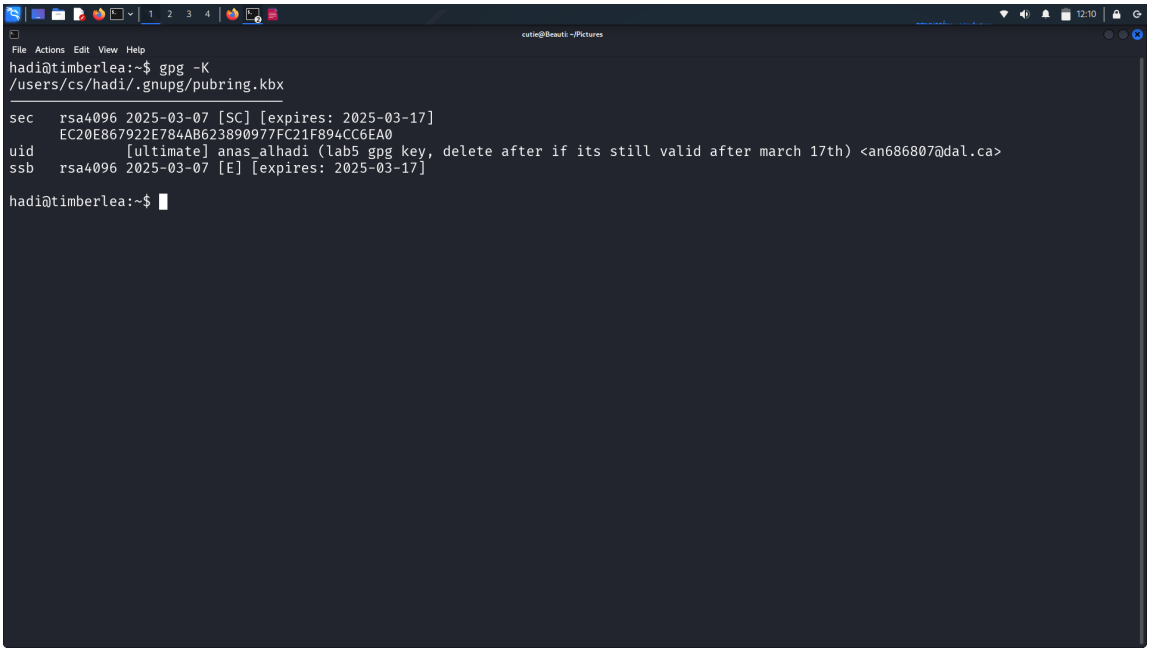
2 Question 2

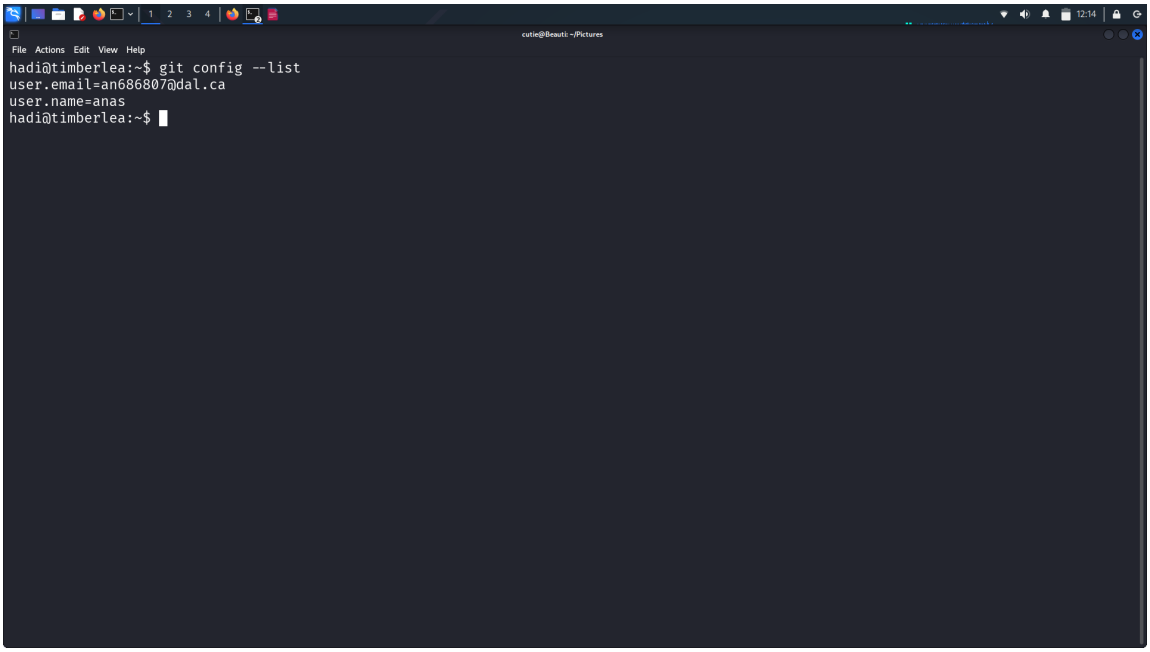
2.1 Part 1



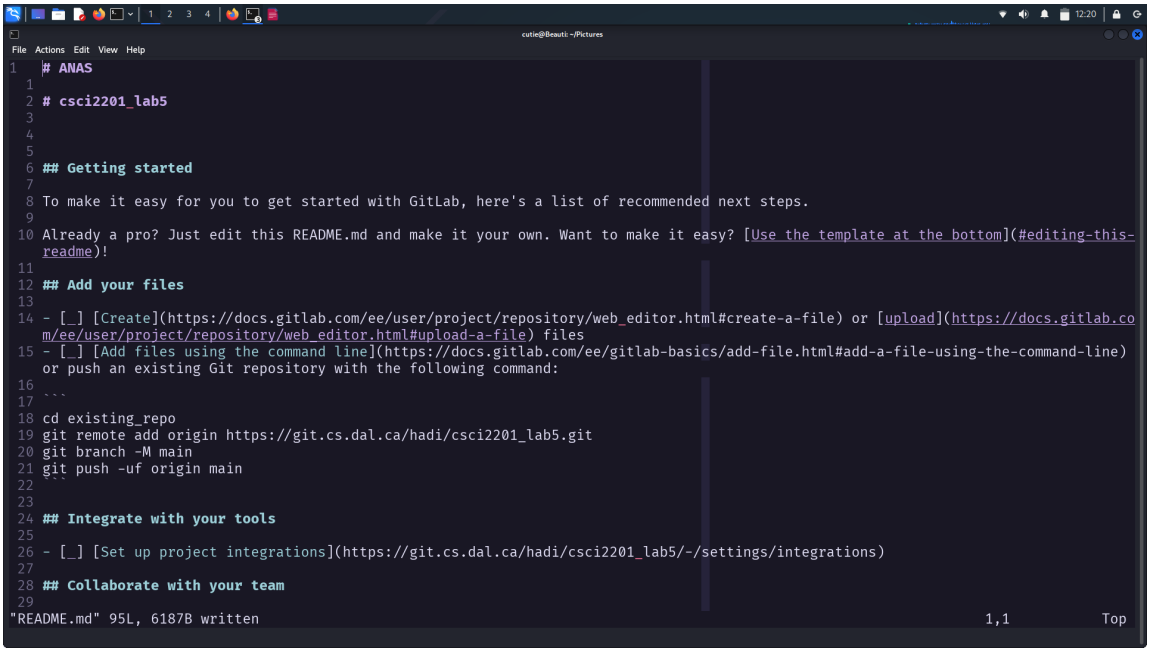


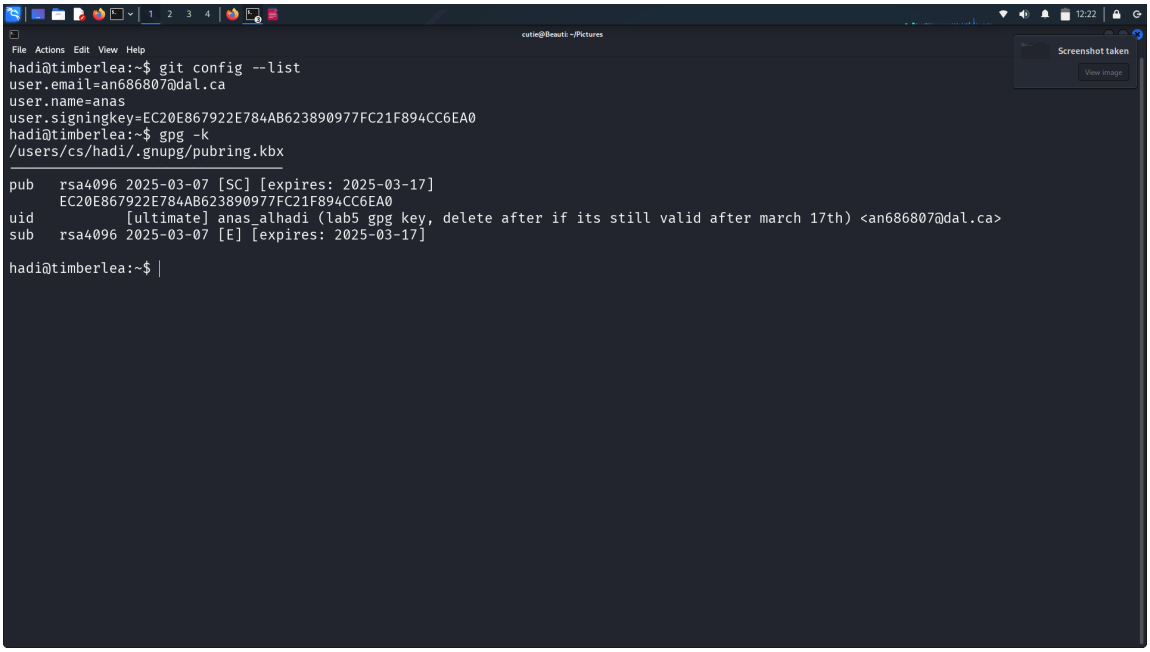
2.2 Part 2

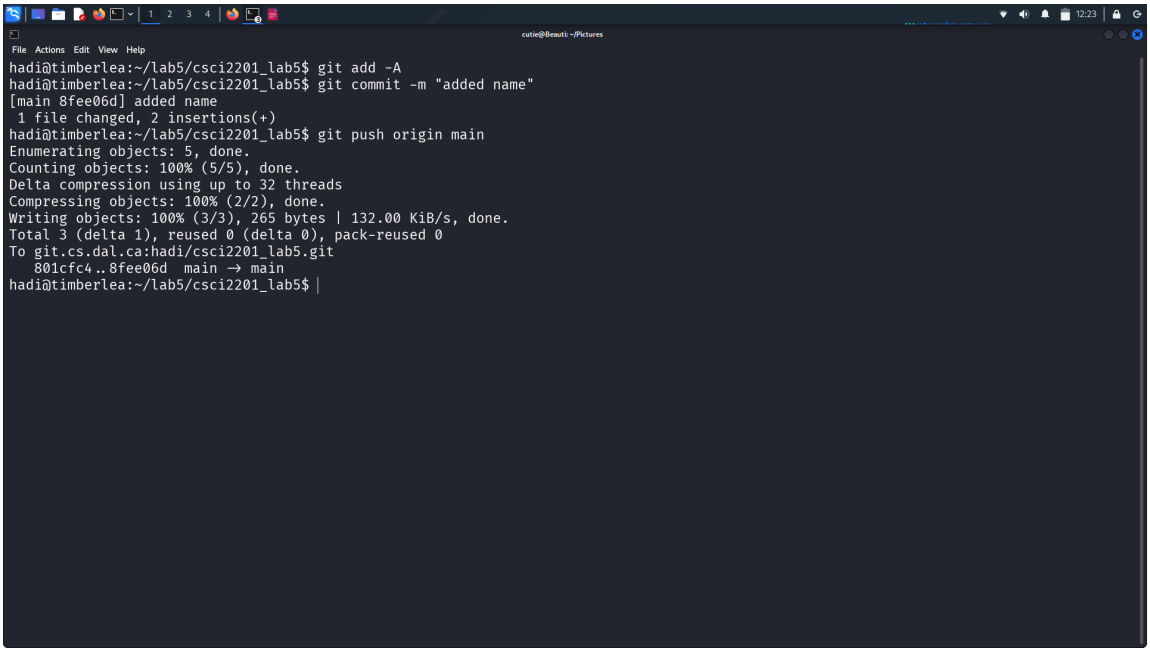

12:10
cutie@Beauti: ~/Pictures
File Actions Edit View Help
hadi@timberlea:~$ gpg -K
/users/cs/hadi/.gnupg/pubring.kbx
sec rsa4096 2025-03-07 [SC] [expires: 2025-03-17]
EC20E867922E784AB623890977FC21F894CC6EA0
uid [ultimate] anas_alhadi (lab5 gpg key, delete after if its still valid after march 17th) <an686807@dal.ca>
ssb rsa4096 2025-03-07 [E] [expires: 2025-03-17]
hadi@timberlea:~$


12:14
cutie@Beauti: ~/Pictures
File Actions Edit View Help
hadi@timberlea:~$ git config --list
user.email=an686807@dal.ca
user.name=anas
hadi@timberlea:~$

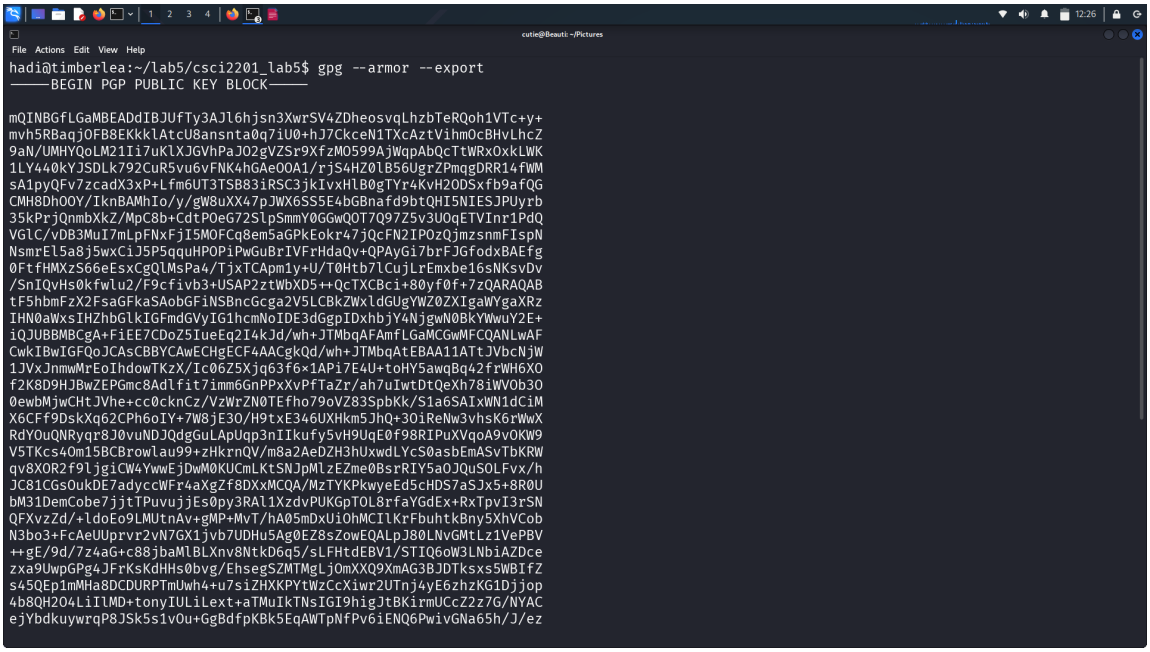
2.3 Part 3


cutie@Beauti: ~/Pictures
File Actions Edit View Help
ANAS
csci2201_lab5
Getting started
To make it easy for you to get started with GitLab, here's a list of recommended next steps.
Already a pro? Just edit this README.md and make it your own. Want to make it easy? [Use the template at the bottom](#editing-this-readme)!
Add your files
- [_] [Create](https://docs.gitlab.com/ee/user/project/repository/web_editor.html#create-a-file) or [upload](https://docs.gitlab.com/ee/user/project/repository/web_editor.html#upload-a-file) files
- [_] [Add files using the command line](https://docs.gitlab.com/ee/gitlab-basics/add-file.html#add-a-file-using-the-command-line) or push an existing Git repository with the following command:
cd existing_repo
git remote add origin https://git.cs.dal.ca/hadi/csci2201_lab5.git
git branch -M main
git push -uf origin main
Integrate with your tools
- [_] [Set up project integrations](https://git.cs.dal.ca/hadi/csci2201_lab5/-/settings/integrations)
Collaborate with your team
"README.md" 95L, 6187B written
1,1
Top


cutie@Beauti: ~/Pictures
File Actions Edit View Help
hadi@timberlea:~$ git config --list
user.email=an686807@dal.ca
user.name=anas
user.signingkey=EC20E867922E784AB623890977FC21F894CC6EA0
hadi@timberlea:~$ gpg -k
/users/cs/hadi/.gnupg/pubring.kbx
pub rsa4096 2025-03-07 [SC] [expires: 2025-03-17]
EC20E867922E784AB623890977FC21F894CC6EA0
uid [ultimate] anas_alhadi (lab5 gpg key, delete after if its still valid after march 17th) <an686807@dal.ca>
sub rsa4096 2025-03-07 [E] [expires: 2025-03-17]
hadi@timberlea:~$
Screenshot taken
View image


cutie@Beauti: ~/Pictures
File Actions Edit View Help
hadi@timberlea:~/lab5/csci2201_lab5$ git add -A
hadi@timberlea:~/lab5/csci2201_lab5$ git commit -m "added name"
[main 8fee06d] added name
1 file changed, 2 insertions(+)
hadi@timberlea:~/lab5/csci2201_lab5$ git push origin main
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Delta compression using up to 32 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 265 bytes | 132.00 KiB/s, done.
Total 3 (delta 1), reused 0 (delta 0), pack-reused 0
To git.cs.dal.ca:hadi/csci2201_lab5.git
801cfc4..8fee06d main → main
hadi@timberlea:~/lab5/csci2201_lab5$

2.4 Part 4


hadi@timberlea:~/lab5/csci2201_lab5$ gpg --armor --export
-----BEGIN PGP PUBLIC KEY BLOCK-----
mQINBGfLGaMBEADdIBJUfTy3AJl6hjsn3XwrSV4ZDheosvqLhzbTeRQoh1VTc+y+
mvh5RBaqjOFB8EKkklAtcU8ansnta0q7iU0+hJ7CkceN1TXcAztVihmOcBHvLhcZ
9aN/UMHYQoLM21Ii7uKlXJGVhPaJO2gVZSr9XfzMO599AjWqpAbQcTtWRxOxkLWK
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sA1pyQFv7zcadX3xP+Lfm6UT3TSB83iRSC3jkIvxHlB0gTYr4KvH2ODSxfb9afQG
CMH8DhOOY/IknBAMhIo/y/gW8uXX47pJWX6SS5E4bGBnafd9btQHI5NIESJPUyrb
35kPrjQnmbXkZ/MpC8b+CdtPOeG72SlpSmmY0GGwQOT7Q97Z5v3UOqETVInr1PdQ
VGlC/vDB3MuI7mLpFNxFjI5MOFCq8em5aGPkEokr47jQcFN2IPOzQjmzsnmFIspN
NsmrEl5a8j5wxCiJ5P5qquHPOPiPwGuBrIVFrHdaQv+QPAyGi7brFJGfodxBAEfg
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tF5hbmFzX2FsaGFkaSAobGFiNSBncGcga2V5LCBkZWxldGUgYWZ0ZXIgaWYgaXRz
IHN0aWxsIHZhbGlkIGFmdGVyIG1hcmNoIDE3dGgpIDxhbjY4NjgwN0BkYWwuY2E+
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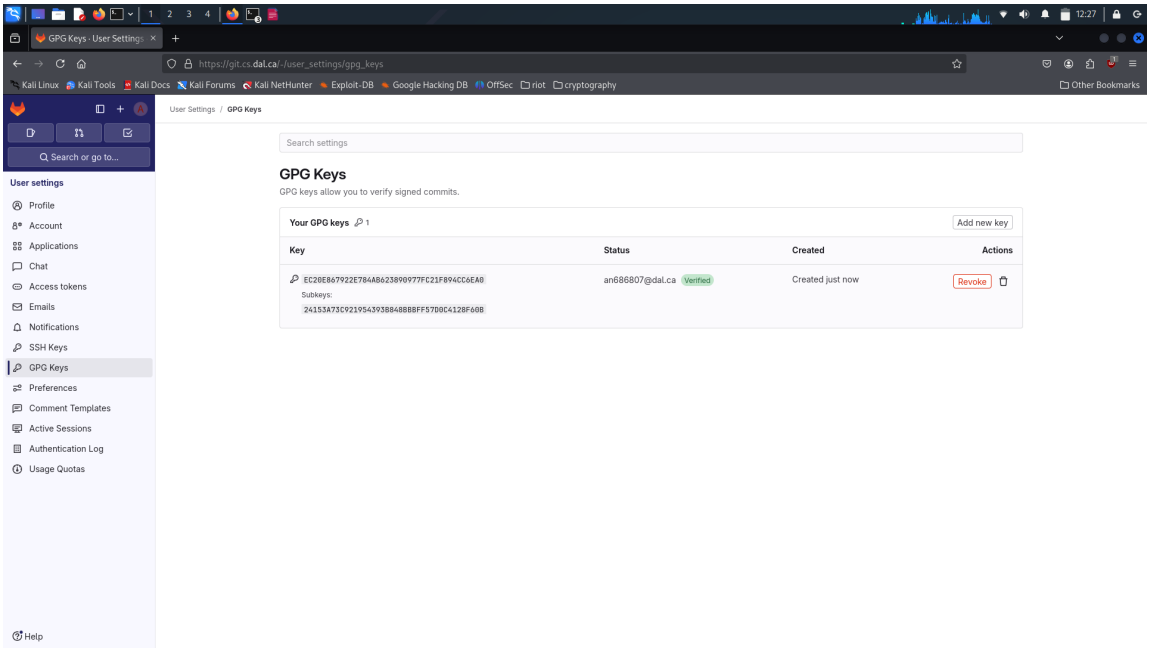
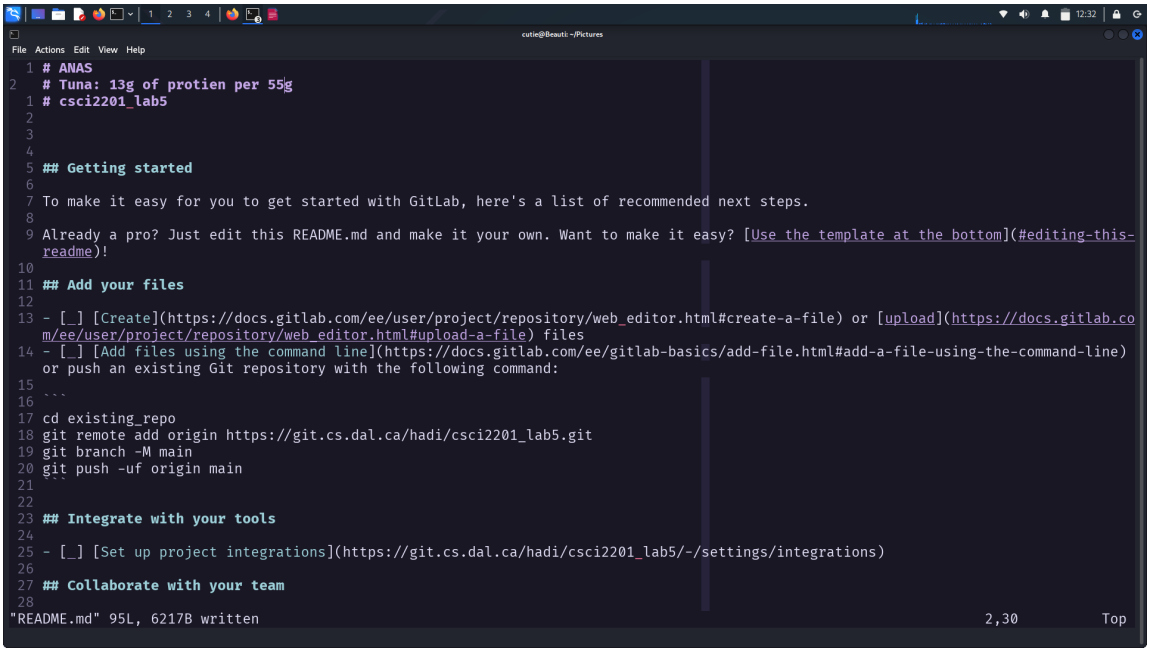
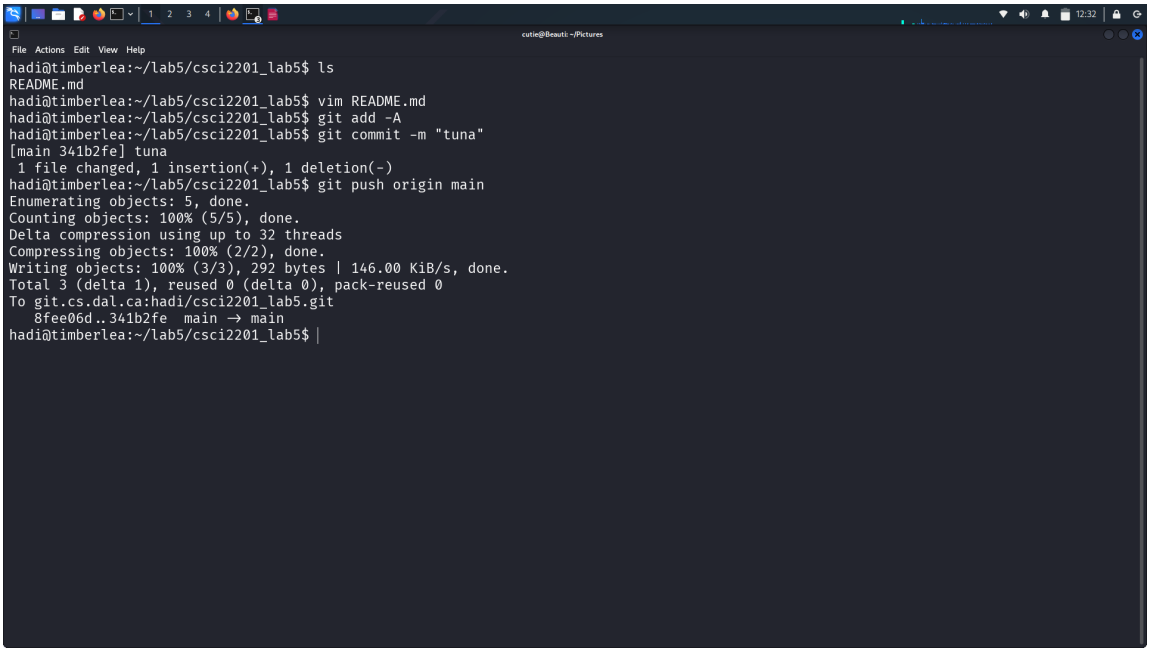
JC81CGsOukDE7adyccWFr4aXgZf8DXxMCQA/MzTYKPkwyeEd5cHDS7aSJx5+8R0U
bM31DemCobe7jjtTPuvujjEs0py3RAl1XzdvPUKGpTOL8rfaYGdEx+RxTpvI3rSN
QFXvzZd/+ldoEo9LMUtnAv+gMP+MvT/hA05mDxUiOhMCIlKrFbuhtkBny5XhVCob
N3bo3+FcAeUUprvr2vN7GX1jvb7UDHu5Ag0EZ8sZowEQALpJ80LNvGMtLz1VePBV
++gE/9d/7z4aG+c88jbaMlBLXnv8NtkD6q5/sLFHtdEBV1/STIQ6oW3LNbiAZDce
zxa9UwpGPg4JFrKsKdHHs0bvg/EhsegSZMTMgLjOmXXQ9XmAG3BJDTksxs5WBIfZ
s45QEp1mMHa8DCDURPTmUwh4+u7siZHXKPYtWzCcXiwr2UTnj4yE6zhzKG1Djjop
4b8QH2O4LiIlMD+tonyIULiLext+aTMuIkTNsIGI9higJtBKirmUCcZ2z7G/NYAC
ejYbdkuywrqP8JSk5s1vOu+GgBdfpKBk5EqAWTpNfPv6iENQ6PwivGNa65h/J/ez


GPG Keys - User Settings
https://git.cs.dal.ca/-/user_settings/gpg_keys
User Settings / GPG Keys
Search or go to...
User settings
Profile
Account
Applications
Chat
Access tokens
Emails
Notifications
SSH Keys
GPG Keys
Preferences
Comment Templates
Active Sessions
Authentication Log
Usage Quotas
Help
Search settings
GPG Keys
GPG keys allow you to verify signed commits.
Your GPG keys 1
Add new key
Key
Status
Created
Actions
EC20E867922E784AB623890977FC21F894CC6EA0
Subkeys:
24153A75C92195439388488BBFF57D0C412BFA0B
an686807@dal.ca
Verified
Created just now
Revoke

2.5 Part 5


cutie@Beauti: ~/Pictures
File Actions Edit View Help
ANAS
Tuna: 13g of protien per 55g
csci2201_lab5
Getting started
To make it easy for you to get started with GitLab, here's a list of recommended next steps.
Already a pro? Just edit this README.md and make it your own. Want to make it easy? [Use the template at the bottom](#editing-this-readme)!
Add your files
- [_] [Create](https://docs.gitlab.com/ee/user/project/repository/web_editor.html#create-a-file) or [upload](https://docs.gitlab.com/ee/user/project/repository/web_editor.html#upload-a-file) files
- [_] [Add files using the command line](https://docs.gitlab.com/ee/gitlab-basics/add-file.html#add-a-file-using-the-command-line) or push an existing Git repository with the following command:
```
cd existing_repo
git remote add origin https://git.cs.dal.ca/hadi/csci2201_lab5.git
git branch -M main
git push -uf origin main
```
Integrate with your tools
- [_] [Set up project integrations](https://git.cs.dal.ca/hadi/csci2201_lab5/-/settings/integrations)
Collaborate with your team
"README.md" 95L, 6217B written
2,30
Top


cutie@Beauti: ~/Pictures
File Actions Edit View Help
hadi@timberlea:~/lab5/csci2201_lab5$ ls
README.md
hadi@timberlea:~/lab5/csci2201_lab5$ vim README.md
hadi@timberlea:~/lab5/csci2201_lab5$ git add -A
hadi@timberlea:~/lab5/csci2201_lab5$ git commit -m "tuna"
[main 341b2fe] tuna
1 file changed, 1 insertion(+), 1 deletion(-)
hadi@timberlea:~/lab5/csci2201_lab5$ git push origin main
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Delta compression using up to 32 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 292 bytes | 146.00 KiB/s, done.
Total 3 (delta 1), reused 0 (delta 0), pack-reused 0
To git.cs.dal.ca:hadi/csci2201_lab5.git
8fee06d..341b2fe main → main
hadi@timberlea:~/lab5/csci2201_lab5$