

VE482 Lab Report

Lab 3 - Fall 2021

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Working with source code

rsync

```
pkgin install rsync
man rsync
cp /usr/src /usr/src_orig -r
# note: -e "ssh -p $(PortNumber)" is used to choose an alternative remote shell program
rsync -avz -e "ssh -p 2222" root@192.168.65.129:/usr/src ~
```

diff/patch

```
man diff
man patch
touch patch
diff -aur /usr/src /usr/src_orig > patch
patch -p10 < patch.txt
patch -R < patch.txt
```

Introduction Sequence

1. Git commit

```
git commit
git commit
```

2. Git Branch

```
git branch bugFix
git checkout bugFix
```

3. Git Merge

```
git checkout -b bugFix
git commit
git checkout main
git commit
git merge bugFix
```

4. Rebase Introduction

```
git checkout -b bugFix
git commit
git checkout main
git commit
git checkout bugFix
git rebase main
```

Ramping Up

1. Moving around in Git

```
git checkout c4
```

2. Relative Refs

```
git checkout c4
git checkout HEAD^
```

3. ~ operator

```
git checkout HEAD^
# move (by force) the branch to ...
git branch -f bugFix C0
git branch -f main C6
```

4. Reversing Changes in Git

```
git reset local~
git checkout pushed
git revert pushed
```

A mixed bag

1. Locally stacked commits

```
git checkout main
git cherry-pick bugFix
```

4. Git Tag

```
git tag v0 c1
git tag v1 c2
git checkout c2
```

Remote

1. Git Remotes

```
git clone
```

2. Git Remote Branches

```
git commit
git checkout o/main
git commit
```

3. Git Fetch

```
git fetch
```

4. Git Pull

```
git pull
```

5. Git Push

```
git commit
git commit
git push
```

air quality info

```
curl "https://aqicn.org/?city=Shanghai&widgetscript&size=large&id=52b39d71decf07.20261781" 2> /dev/null |  
sed -rn 's/.*title=\\.*\\("&>([[[:digit:]]{1,3}).*hdrt.*10px.*>([-]?[[:digit:]]{1,5})<.*AQ: \\1 Temp: \\2 °C/p'
```

IP address

```
ifconfig | awk -e '{for(i=1;i≤NF;i++){ if($i=="inet"){print $(i+1)} } }'
```