```
~
$ ❯ brew update
Updated 4 taps (ngrok/ngrok, supabase/tap, homebrew/core and homebrew/cask).
==> New Formulae
cotp                    git-split-diffs         inlyne                  rtabmap                 whisperkit-cli
erlang_ls               ingress2gateway         ratchet                 tartufo                 yo
==> New Casks
cahier                          instantview             posture-pal                 timelapze
galaxybudsclient                ireal-pro               proton-mail                 yes24-ebook
ibkr                            nperf                   steinberg-activation-manager
==> Outdated Formulae
docker              flyctl              kubernetes-cli          sqlite              yarn
docker-completion   gh                  ruby-build              supabase            yq
==> Outdated Casks
1password-cli                                   ngrok

You have 10 outdated formulae and 2 outdated casks installed.
You can upgrade them with brew upgrade
or list them with brew outdated.                                                              13.37s


~
$ ❯ brew upgrade
==> Upgrading 10 outdated packages:
yq 4.42.1 -> 4.43.1
flyctl 0.2.16 -> 0.2.23
docker 25.0.4 -> 26.0.0
gh 2.45.0 -> 2.46.0
docker-completion 25.0.4 -> 26.0.0
ruby-build 20240221 -> 20240319
sqlite 3.45.1 -> 3.45.2
yarn 1.22.21 -> 1.22.22
supabase/tap/supabase 1.148.6 -> 1.150.0
kubernetes-cli 1.29.2 -> 1.29.3
==> Downloading https://ghcr.io/v2/homebrew/core/sqlite/manifests/3.45.2
################################################################################################### 100.0%
==> Fetching sqlite
==> Downloading https://ghcr.io/v2/homebrew/core/sqlite/blobs/sha256:40d4422804074ca098583526923f1d3c5a3710f57c5dc5525f493e6a17121c8b
################################################################################################### 100.0%
==> Downloading https://ghcr.io/v2/homebrew/core/flyctl/manifests/0.2.23
################################################################################################### 100.0%
==> Fetching flyctl
==> Downloading https://ghcr.io/v2/homebrew/core/flyctl/blobs/sha256:24b85e2dd8526a650cde364c8544fa97f466dd6e936135ec308d451b36c9f558
################################################################################################### 100.0%
==> Downloading https://ghcr.io/v2/homebrew/core/docker-completion/manifests/26.0.0
################################################################################################### 100.0%
==> Fetching docker-completion
==> Downloading https://ghcr.io/v2/homebrew/core/docker-completion/blobs/sha256:91b40e60757b58372bc79a8bb02869ff34af18386456094b99fde3b
################################################################################################### 100.0%
==> Downloading https://ghcr.io/v2/homebrew/core/docker/manifests/26.0.0
################################################################################################### 100.0%
==> Fetching docker
==> Downloading https://ghcr.io/v2/homebrew/core/docker/blobs/sha256:51799520300bb93bf1ae1f57344a883fe7c118952b467d34c2524fe66d35128c
################################################################################################### 100.0%
==> Downloading https://ghcr.io/v2/homebrew/core/gh/manifests/2.46.0
################################################################################################### 100.0%
==> Fetching gh
==> Downloading https://ghcr.io/v2/homebrew/core/gh/blobs/sha256:da6339a487fa934079af693684e2c32a4e7a7d656f91a7298a751a3b429472b7
################################################################################################### 100.0%
==> Downloading https://ghcr.io/v2/homebrew/core/ruby-build/manifests/20240319
################################################################################################### 100.0%
==> Fetching ruby-build
==> Downloading https://ghcr.io/v2/homebrew/core/ruby-build/blobs/sha256:48a2fa2d1e3a6356ed64cdc420251ce5f6e0ee33a02b9f133603f30ca6ddb9
################################################################################################### 100.0%
==> Downloading https://ghcr.io/v2/homebrew/core/yarn/manifests/1.22.22
################################################################################################### 100.0%
==> Fetching yarn
==> Downloading https://ghcr.io/v2/homebrew/core/yarn/blobs/sha256:9a80ed679d05f019e217f737a7d531f4578144b65be6a1a19d3322ef41d25683
################################################################################################### 100.0%
==> Fetching supabase/tap/supabase
==> Downloading https://github.com/supabase/cli/releases/download/v1.150.0/supabase_darwin_arm64.tar.gz
==> Downloading from https://objects.githubusercontent.com/github-production-release-asset-2e65be/314160187/4dabedf4-a44c-403c-95b7-a55
################################################################################################### 100.0%
==> Downloading https://ghcr.io/v2/homebrew/core/yq/manifests/4.43.1
################################################################################################### 100.0%
==> Fetching yq
==> Downloading https://ghcr.io/v2/homebrew/core/yq/blobs/sha256:bc36b4b41929e9e689befbecb557dbf7acf6c743ca17809f65a109ef23833c0b
################################################################################################### 100.0%
==> Downloading https://ghcr.io/v2/homebrew/core/kubernetes-cli/manifests/1.29.3
################################################################################################### 100.0%
==> Fetching kubernetes-cli
==> Downloading https://ghcr.io/v2/homebrew/core/kubernetes-cli/blobs/sha256:bec474887cbeb601422ba44ecdc63dbce2e1ace2b21019ac2d544cc7c7
################################################################################################### 100.0%
==> Upgrading sqlite
  3.45.1 -> 3.45.2

==> Pouring sqlite--3.45.2.arm64_sonoma.bottle.tar.gz
🍺  /opt/homebrew/Cellar/sqlite/3.45.2: 11 files, 4.8MB
==> Running `brew cleanup sqlite`...
Disable this behaviour by setting HOMEBREW_NO_INSTALL_CLEANUP.
Hide these hints with HOMEBREW_NO_ENV_HINTS (see `man brew`).
Removing: /opt/homebrew/Cellar/sqlite/3.45.1... (11 files, 4.8MB)
Removing: /Users/replicamask/Library/Caches/Homebrew/sqlite--3.45.1... (2.2MB)
==> Upgrading flyctl
  0.2.16 -> 0.2.23
```

```
==> Pouring flyctl--0.2.23.arm64_sonoma.bottle.tar.gz
==> Caveats
zsh completions have been installed to:
  /opt/homebrew/share/zsh/site-functions
==> Summary
🍺  /opt/homebrew/Cellar/flyctl/0.2.23: 9 files, 50.2MB
==> Running `brew cleanup flyctl`...
Removing: /opt/homebrew/Cellar/flyctl/0.2.16... (9 files, 50.1MB)
Removing: /Users/replicamask/Library/Caches/Homebrew/flyctl--0.2.16... (16.7MB)
==> Upgrading docker-completion
  25.0.4 -> 26.0.0

==> Pouring docker-completion--26.0.0.all.bottle.tar.gz
🍺  /opt/homebrew/Cellar/docker-completion/26.0.0: 9 files, 338.7KB
==> Running `brew cleanup docker-completion`...
Removing: /opt/homebrew/Cellar/docker-completion/25.0.4... (9 files, 338.7KB)
Removing: /Users/replicamask/Library/Caches/Homebrew/docker-completion--25.0.4... (68.3KB)
==> Upgrading docker
  25.0.4 -> 26.0.0

==> Pouring docker--26.0.0.arm64_sonoma.bottle.tar.gz
🍺  /opt/homebrew/Cellar/docker/26.0.0: 13 files, 23MB
==> Running `brew cleanup docker`...
Removing: /opt/homebrew/Cellar/docker/25.0.4... (13 files, 23.0MB)
Removing: /Users/replicamask/Library/Caches/Homebrew/docker--25.0.4... (7.6MB)
==> Upgrading gh
  2.45.0 -> 2.46.0

==> Pouring gh--2.46.0.arm64_sonoma.bottle.tar.gz
==> Caveats
zsh completions have been installed to:
  /opt/homebrew/share/zsh/site-functions
==> Summary
🍺  /opt/homebrew/Cellar/gh/2.46.0: 194 files, 42.4MB
==> Running `brew cleanup gh`...
Removing: /opt/homebrew/Cellar/gh/2.45.0... (194 files, 42.3MB)
Removing: /Users/replicamask/Library/Caches/Homebrew/gh--2.45.0... (9.8MB)
==> Upgrading ruby-build
  20240221 -> 20240319

==> Pouring ruby-build--20240319.all.bottle.tar.gz
🍺  /opt/homebrew/Cellar/ruby-build/20240319: 604 files, 319.4KB
==> Running `brew cleanup ruby-build`...
Removing: /opt/homebrew/Cellar/ruby-build/20240221... (602 files, 317.2KB)
Removing: /Users/replicamask/Library/Caches/Homebrew/ruby-build--20240221... (65.9KB)
==> Upgrading yarn
  1.22.21 -> 1.22.22

==> Pouring yarn--1.22.22.all.bottle.tar.gz
==> Caveats
yarn requires a Node installation to function. You can install one with:
  brew install node
==> Summary
🍺  /opt/homebrew/Cellar/yarn/1.22.22: 15 files, 5MB
==> Running `brew cleanup yarn`...
Removing: /opt/homebrew/Cellar/yarn/1.22.21... (15 files, 5MB)
Removing: /Users/replicamask/Library/Caches/Homebrew/yarn--1.22.21... (1.2MB)
==> Upgrading supabase/tap/supabase
  1.148.6 -> 1.150.0

==> Caveats
zsh completions have been installed to:
  /opt/homebrew/share/zsh/site-functions
==> Summary
🍺  /opt/homebrew/Cellar/supabase/1.150.0: 8 files, 32.6MB, built in 3 seconds
==> Running `brew cleanup supabase`...
Removing: /opt/homebrew/Cellar/supabase/1.148.6... (8 files, 34.2MB)
Removing: /Users/replicamask/Library/Caches/Homebrew/supabase--1.148.6.tar.gz... (11.3MB)
==> Upgrading yq
  4.42.1 -> 4.43.1

==> Pouring yq--4.43.1.arm64_sonoma.bottle.tar.gz
==> Caveats
zsh completions have been installed to:
  /opt/homebrew/share/zsh/site-functions
==> Summary
🍺  /opt/homebrew/Cellar/yq/4.43.1: 9 files, 9.7MB
==> Running `brew cleanup yq`...
Removing: /opt/homebrew/Cellar/yq/4.42.1... (9 files, 9.6MB)
Removing: /Users/replicamask/Library/Caches/Homebrew/yq--4.42.1... (3.7MB)
==> Upgrading kubernetes-cli
  1.29.2 -> 1.29.3

==> Pouring kubernetes-cli--1.29.3.arm64_sonoma.bottle.tar.gz
==> Caveats
zsh completions have been installed to:
  /opt/homebrew/share/zsh/site-functions
==> Summary
🍺  /opt/homebrew/Cellar/kubernetes-cli/1.29.3: 234 files, 59.4MB
==> Running `brew cleanup kubernetes-cli`...
Removing: /opt/homebrew/Cellar/kubernetes-cli/1.29.2... (234 files, 59.2MB)
```

```
Removing: /Users/replicamask/Library/Caches/Homebrew/kubernetes-cli--1.29.2... (16.9MB)
==> Casks with 'auto_updates true' or 'version :latest' will not be upgraded; pass `--greedy` to upgrade them.
==> Upgrading 2 outdated packages:
1password-cli 2.25.0 -> 2.26.1
ngrok 3.7.0,at74kdRaEcZ,a -> 3.8.0,4JvNoWcrBdQ,a
==> Upgrading 1password-cli
==> Downloading https://cache.agilebits.com/dist/1P/op2/pkg/v2.26.1/op_darwin_arm64_v2.26.1.zip
######################################################################################################### 100.0%
==> Unlinking Binary '/opt/homebrew/bin/op'
==> Linking Binary 'op' to '/opt/homebrew/bin/op'
==> Purging files for version 2.25.0 of Cask 1password-cli
🍺  1password-cli was successfully upgraded!
==> Upgrading ngrok
==> Caveats
To install shell completions, add this to your profile:
  if command -v ngrok &>/dev/null; then
    eval "$(ngrok completion)"
  fi

==> Downloading https://raw.githubusercontent.com/Homebrew/homebrew-cask/ec2e895509b290247782e9b859f85706212068c8/Casks/n/ngrok.rb
######################################################################################################### 100.0%
==> Downloading https://bin.equinox.io/a/4JvNoWcrBdQ/ngrok-v3-3.8.0-stable-darwin-arm64.zip
######################################################################################################### 100.0%
==> Unlinking Binary '/opt/homebrew/bin/ngrok'
==> Linking Binary 'ngrok' to '/opt/homebrew/bin/ngrok'
==> Purging files for version 3.7.0,at74kdRaEcZ,a of Cask ngrok
🍺  ngrok was successfully upgraded!
==> Caveats
==> flyctl
zsh completions have been installed to:
  /opt/homebrew/share/zsh/site-functions
==> gh
zsh completions have been installed to:
  /opt/homebrew/share/zsh/site-functions
==> yarn
yarn requires a Node installation to function. You can install one with:
  brew install node
==> supabase
zsh completions have been installed to:
  /opt/homebrew/share/zsh/site-functions
==> yq
zsh completions have been installed to:
  /opt/homebrew/share/zsh/site-functions
==> kubernetes-cli
zsh completions have been installed to:
  /opt/homebrew/share/zsh/site-functions
==> ngrok
To install shell completions, add this to your profile:
  if command -v ngrok &>/dev/null; then
    eval "$(ngrok completion)"
  fi                                                                                                      1m:6s

~
$ ❯ brew tap hashicorp/tap
==> Tapping hashicorp/tap
Cloning into '/opt/homebrew/Library/Taps/hashicorp/homebrew-tap'...
remote: Enumerating objects: 4198, done.
remote: Counting objects: 100% (499/499), done.
remote: Compressing objects: 100% (144/144), done.
remote: Total 4198 (delta 412), reused 403 (delta 355), pack-reused 3699
Receiving objects: 100% (4198/4198), 769.88 KiB | 1.09 MiB/s, done.
Resolving deltas: 100% (2759/2759), done.
Tapped 2 casks and 29 formulae (88 files, 1MB).                                                          2.71s

~
$ ❯ brew install hashicorp/tap/terraform
==> Fetching hashicorp/tap/terraform
==> Downloading https://releases.hashicorp.com/terraform/1.7.5/terraform_1.7.5_darwin_arm64.zip
######################################################################################################### 100.0%
==> Installing terraform from hashicorp/tap
🍺  /opt/homebrew/Cellar/terraform/1.7.5: 3 files, 88.7MB, built in 1 second
==> Running `brew cleanup terraform`...
Disable this behaviour by setting HOMEBREW_NO_INSTALL_CLEANUP.
Hide these hints with HOMEBREW_NO_ENV_HINTS (see `man brew`).                                             12.58s

~
$ ❯ brew update
==> Updating Homebrew...
Already up-to-date.                                                                                       1.34s

~
$ ❯ brew upgrade hashicorp/tap/terraform
Warning: hashicorp/tap/terraform 1.7.5 already installed                                                  458ms

~
$ ❯ terraform --version
Terraform v1.7.5
on darwin_arm64                                                                                           1.09s

~
$ ❯ curl "https://awscli.amazonaws.com/AWSCLIV2.pkg" -o "AWSCLIV2.pkg"
  % Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
                                 Dload  Upload   Total   Spent    Left  Speed
100 37.5M  100 37.5M    0     0  3062k      0  0:00:12  0:00:12 --:--:-- 4914k                            12.58s
```

```
~
$ ❯ sudo installer -pkg ./AWSCLIV2.pkg -target /
Password:
installer: Package name is AWS Command Line Interface
installer: Installing at base path /
installer: The install was successful.                                                                                    20.22s

~
$ ❯ which aws
/usr/local/bin/aws                                                                                                         10ms

~
$ ❯ aws --version
aws-cli/2.15.32 Python/3.11.8 Darwin/23.4.0 exe/x86_64 prompt/off                                                          4.82s

~
$ ❯ aws configure
AWS Access Key ID [None]: ^C                                                                                               2.83s

~
$ ❯ brew install 1password-cli
==> Downloading https://formulae.brew.sh/api/formula.jws.json
######################################################################################################################### 100.0%
==> Downloading https://formulae.brew.sh/api/cask.jws.json
######################################################################################################################### 100.0%
Warning: Not upgrading 1password-cli, the latest version is already installed                                              5.07s

~
$ ❯ op vault list
ID                              NAME
████████████████████████        ████████████████
                                ████████████
                                █████████████████
                                ██████████████
                                █████████
                                ███████████████
                                                                                                                          13.21s

~
$ ❯ op vault list
ID                              NAME
████████████████████████        ████████████████
                                ████████████
                                █████████████████
                                ██████████████
                                █████████
                                                                                                                          410ms

~
$ ❯ aws configure
AWS Access Key ID [None]: ███████████████
AWS Secret Access Key [None]: ████████████████████████████████████
Default region name [None]:
Default output format [None]:                                                                                             1m:7s

~
$ ❯ cd justin-irl/                                                                                                         13ms

~/justin-irl
$ ❯ gh repo clone justin-irl/CSD01010-007-B-W24-LAB2
Cloning into 'CSD01010-007-B-W24-LAB2'...
remote: Enumerating objects: 5, done.
remote: Counting objects: 100% (5/5), done.
remote: Compressing objects: 100% (4/4), done.
remote: Total 5 (delta 0), reused 0 (delta 0), pack-reused 0
Receiving objects: 100% (5/5), done.                                                                                      871ms

~/justin-irl
$ ❯ cd CSD01010-007-B-W24-LAB2                                                                                             9ms

~/justin-irl/CSD01010-007-B-W24-LAB2 on ⏱ main
$ ❯ cp -r /Users/███████/Documents/yorku/Module2/02.Lab2-Terraform/ ~/justin-irl/CSD01010-007-B-W24-LAB2                   65ms

~/justin-irl/CSD01010-007-B-W24-LAB2 on ⏱ main ●
$ ❯ ls -a
.                                                    AWSCLIV2.pkg
..                                                   LICENSE
.DS_Store                                            README.md
.git                                                 main.tf
.gitignore                                           modules
02.Create AWS Free Tier Account.docx                 outputs.tf
02.Lab2-Manage AWS Infrastructure with Terraform.docx variables.tf                                                        16ms

~/justin-irl/CSD01010-007-B-W24-LAB2 on ⏱ main ●
$ ❯ code .                                                                                                                 147ms

~/justin-irl/CSD01010-007-B-W24-LAB2 on ⏱ main ●
$ ❯ push "add lab files"
running:
git add . && git commit -m "" && git push origin main

[main 57ff571] add lab files
 15 files changed, 221 insertions(+)
 create mode 100644 .DS_Store
 create mode 100644 02.Create AWS Free Tier Account.docx
 create mode 100644 02.Lab2-Manage AWS Infrastructure with Terraform.docx
```

```
 create mode 100644 AWSCLIV2.pkg
 create mode 100644 main.tf
 create mode 100644 modules/.DS_Store
 create mode 100644 modules/compute/main.tf
 create mode 100644 modules/compute/outputs.tf
 create mode 100644 modules/compute/userdata.tpl
 create mode 100644 modules/compute/variables.tf
 create mode 100644 modules/vpc/main.tf
 create mode 100644 modules/vpc/outputs.tf
 create mode 100644 modules/vpc/variables.tf
 create mode 100644 outputs.tf
 create mode 100644 variables.tf
Enumerating objects: 21, done.
Counting objects: 100% (21/21), done.
Delta compression using up to 8 threads
Compressing objects: 100% (20/20), done.
Writing objects: 100% (20/20), 43.96 MiB | 3.47 MiB/s, done.
Total 20 (delta 2), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (2/2), done.
To https://github.com/justin-irl/CSDO1010-007-B-W24-LAB2.git
   877341f..57ff571  main -> main                                                        16.06s

~/justin-irl/CSDO1010-007-B-W24-LAB2 on ⚡ main
$ ❯ ls
02.Create AWS Free Tier Account.docx              main.tf
02.Lab2-Manage AWS Infrastructure with Terraform.docx modules
AWSCLIV2.pkg                                       outputs.tf
LICENSE                                            variables.tf
README.md                                                                                29ms

~/justin-irl/CSDO1010-007-B-W24-LAB2 on ⚡ main
$ ❯ open ⬝                                                                               129ms

~/justin-irl/CSDO1010-007-B-W24-LAB2 on ⚡ main
$ ❯ touch worklog.md                                                                      13ms

~/justin-irl/CSDO1010-007-B-W24-LAB2 on ⚡ main ● ●
$ ❯
```