

Jordan Quigtar

CSS 436

Program 3

## Instructions

### How to build:

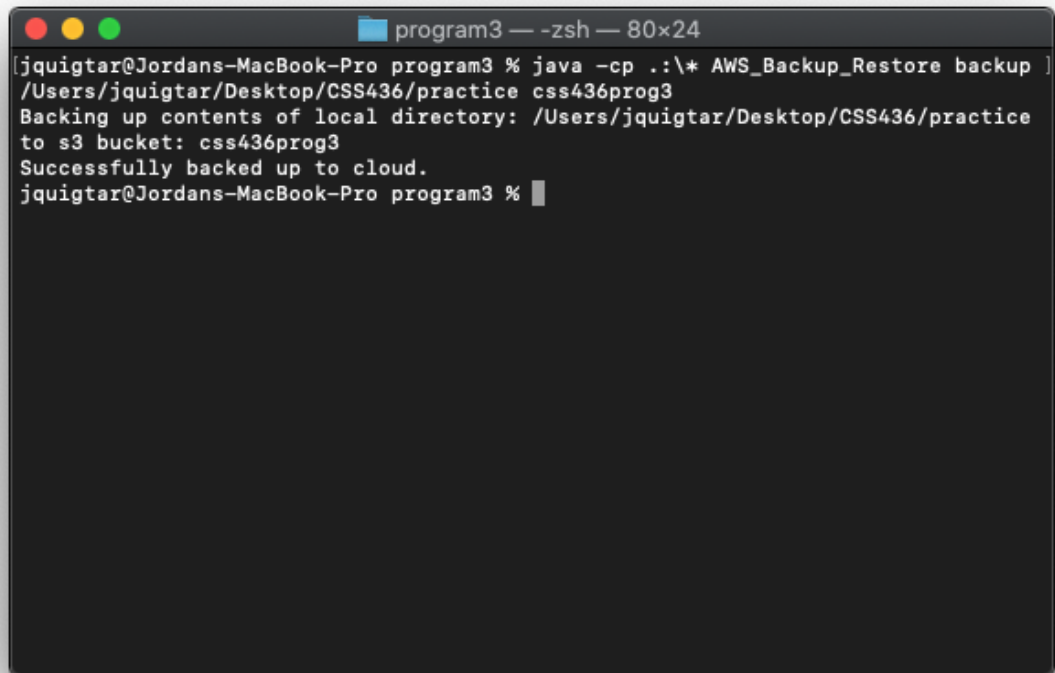
- I will include a java.class file to execute, but to build it yourself you can
- Cd into directory containing AWS\_Backup\_Restore.java file along with all .jar files I included
- Run this command to compile
  - `javac -cp \* *.java`
- Then run this command to run the program
  - Backup
    - `java -cp .:\* AWS_Backup_Restore backup directory bucket`
  - Restore
    - `java -cp .:\* AWS_Backup_Restore restore bucket directory`
  - Replace bucket and directory with your own bucket and directory
- Aws CLI should already be configured
- Used java 15 jdk
- Tested and works on Mac terminal command line with Mac files and directories

## **Description**

### **Design:**

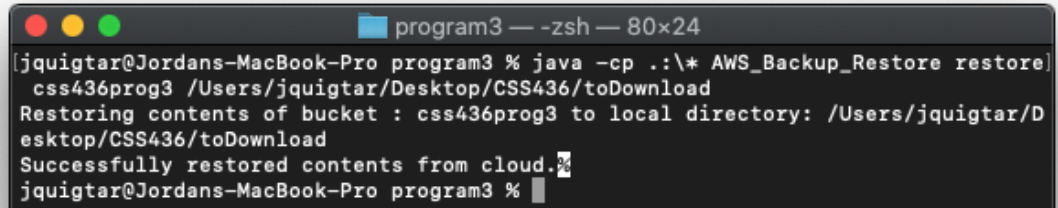
The overall design of this program is simple, there are a few helper functions for the main function, three of them are for 'backup', and one of them is for 'restore'. The 3 'backup' functions help to recursively search through the file directory given in command line arguments and back up those files to the aws s3 bucket given in the command line arguments. The restore function works around recursively searching through s3 bucket by using aws transfer manager which downloads the objects from s3 bucket while keeping directory structure intact. Overall the main method is very simple and handles command line arguments and errors with that. If no errors are given the main method will either run 'backup', or 'restore'. Based on what was given in command line arguments.

## Backup Running:

A screenshot of a macOS terminal window titled "program3 — zsh — 80x24". The window shows a user named "jquigtar" at a "Jordans-MacBook-Pro" machine. The user has executed the command "java -cp .:\\* AWS\_Backup\_Restore backup /Users/jquigtar/Desktop/CSS436/practice css436prog3". The output of the command is displayed in three lines: "Backing up contents of local directory: /Users/jquigtar/Desktop/CSS436/practice", "to s3 bucket: css436prog3", and "Successfully backed up to cloud.". The terminal prompt "jquigtar@Jordans-MacBook-Pro program3 %" is visible at the bottom, followed by a cursor.

```
jquigtar@Jordans-MacBook-Pro program3 % java -cp .:\* AWS_Backup_Restore backup ]
/Users/jquigtar/Desktop/CSS436/practice css436prog3
Backing up contents of local directory: /Users/jquigtar/Desktop/CSS436/practice
to s3 bucket: css436prog3
Successfully backed up to cloud.
jquigtar@Jordans-MacBook-Pro program3 %
```

## Restore Running:



```
program3 — -zsh — 80x24
[jquigtar@Jordans-MacBook-Pro program3 % java -cp .:\* AWS_Backup_Restore restore]
css436prog3 /Users/jquigtar/Desktop/CSS436/toDownload
Restoring contents of bucket : css436prog3 to local directory: /Users/jquigtar/D
esktop/CSS436/toDownload
Successfully restored contents from cloud.%
[jquigtar@Jordans-MacBook-Pro program3 % ]
```