Goal: Make a pipeline script with a Build, Test, and Deployment stage. After you create the script; trigger your build for every 10 minutes. Once you have successfully run a scheduled job, find a way to schedule your ec2 to shutdown by the end of class.

Documentation:

1. I started by googling if there was anything “cool” I could build with Jenkins to get my brain thinking a little since I had no idea about what I should build. I then came across a site where someone made a jenkins pipeline that first made a directory, a file within that directory and wrote some text to the file. They then tested the file by using the test command and grep commands and deployed it by archiving the file so it can be downloaded later.
2. I googled what the test command does and it seems very useful when used with the -f option because it checks to see if the file even exists and is a regular file.
3. I did something very similar in my build but in my test stage I just ‘cat’ed the file to make sure that the text was in the file correctly.
4. I then googled cron jobs to find out how to run the script every 10 minutes.

5. I was looking through the jenkins.io site and found the syntax for incorporating a trigger that will run a cron job and it was successful. I also noticed that if you run a build before the 10th minute mark it will run it again on the 10th minute as opposed to 10 minutes after you first ran your build.

Example 11. Triggers, Declarative Pipeline

```
// Declarative //
pipeline {
    agent any
    triggers {
        cron('H */4 * * 1-5')
    }
    stages {
        stage('Example') {
            steps {
                echo 'Hello World'
            }
        }
    }
}
```

6. For shutting down the instance by the end of class. I first had to google how to stop an ec2 instance on jenkins and found the following syntax “aws ec2 stop-instances --instance-ids i-0e5cbe4eccbbd8dc6” where the id is the id number of your instance so when i ran that I got an error regarding the region so I added the region option to the command. I then got an error regarding the credentials so I went back to searching on google. I came across a site that showed you how to add your AWS credentials(https://coralogix.com/blog/ci-cd-tutorial-how-to-deploy-an-aws-jenkins-pipeline/) and used this page(https://www.jenkins.io/doc/book/pipeline/jenkinsfile/#setting-environment-variables) to figure out the syntax and once I did that the build was successful and my instance was stopped. I then added a trigger of “0 9 * * * “ to the instance, for it to shut down at 9 pm.