Goal

1. Make a pipeline script with a Build, Test, and Deployment stage.
2. Trigger your build for every 10 minutes.
3. Find a way to schedule your ec2 to shutdown by the end of class.

Steps to making a pipeline script with a Build, Test, and Deployment stage.

When it is time to create a pipeline script that will build, test and deploy, one must ensure to define these three stages correctly before proceeding. I will break down the script I wrote to properly explain each part.

Start of the pipeline:

```
pipeline {
   agent any
```

- When starting a pipeline use must initiate the pipeline block by typing (pipeline {). This block is where all the pipeline code will be stored and it must be initialized every time. The syntax is case sensitive so do not capitalize the word pipeline.
- (agent any) specifies when the Jenkins jobs should run. The term ‘agent’ is like a call variable and ‘any’ represents any available agent possible. It is possible to specifically declare a specific agent to perform a task but for this case it is not necessary.

```
stages {
  stage('Build') {
    steps {
    echo 'Building - Hello World 1'
       }
     }
```

- The stages block hold different executable stage blocks. You must have one stage block that is created in the stages block for the pipeline script to run.
- The ‘stage’ block contains the actual execute steps or the process that needs to be performed. You must create one executable action inside the ‘stage’ block for the pipeline script to work. The different executable actions for this command are Build, Test & Deploy:
    - Build mean that compile the code
    - Test means test the compiled code for errors
    - Deploy means release the tested code. If the code fails the testing phase it will not be deployed.

Step to trigger your build for every 10 minutes

```
 triggers {
     cron('*/10 * * * *')
        }
```

- Triggers are used to help automate your pipeline script. We can configure the build to run in certain time intervals using the triggers block. We can use the special method called cron() within the trigger block to configure the build schedule.
- Cron is a syntax for time intervals. Cron configuration contains 5 fields representing:
    - minute (0-59)
    - hour (0-23)
    - day of the month (1-31)
    - month (1-12)
    - day of the week (0-7)
- Use the following link to generate your cron syntax: https://crontab.guru/

Step to schedule your ec2 to shutdown by the end of class

Working on it

Final Full Code

```
pipeline {
    agent any
    triggers {
        cron('*/10 * * * *')
            }
               stages {
                stage('Build') {
                    steps {
                    echo 'Building - Hello World 1'
                    }
                }
                stage('Test') {
                    steps {
                        echo 'Testing - Hello World 1'
                    }
                }
                stage('Deploy') {
                    steps {
                        echo 'Deploying - Hello World 1'
                    }
                }
            }
}
```