-create github repo with terraform .gitignore

-open editor (vs code) from github desktop via repo in browser

-create main.tf file

-create providers block

-create ec2 instance block

 -open terraform registry on ec2

 -use the variables that are required then the ones you know you need (ami, isntance type, key name, secu

 -for each value make it a variable. HOW?

-create a variables.tf

-for each variable in the ec2 block, make a variable in the variables.tf

-for key pair, i used a preexisting key pair and dragged it into the editor

-opened terminal in editor and ran 'ssh-keygen -y -f keypair.pem > keypair.pub' to create a .pub file from th

-created a resource in the variables.tf for the keypair

-create a bash userdata script to bootstrap jenkins to the instance

-create s3 bucket

-create an iam role

 -create actual role

 -create trust policy for role

 -create access policy

 -create access policy doc

 -attach policy to role

 -create iam instance for ec2 to use

-split files into same services per file

-add outputs.tf to output the public dns to terminal

-run terraform commands

Verify:

-ssh into instnace and get jenkins admin pw

-get the public ip and go there via browser and input the admin pw

Obstacles:

-find the jenkins admin pw at /var/lib/jenkins/secrets/initialAdminPassword. ssh into instance and run 'sudo

-making sure the security group youre using (i used a preexisting one) has 8080 open

-was using a vresion of ubuntu (Ubuntu Noble 24.04) that is very new and unsupported yet by Jenkins' APT

-make sure if you do restarts/stops on the EC2 instance you get the new IP address unless you set an elas