# Module 4 - Code Signing

**Goal**: Learn Sign a file

## Steps

1. Generate a GPG key pair

gpg --full-generate-key

1. Follow the prompts. You may use any email, it doesn't need to be real. When asked for a passphrase, leave it empty and confirm
2. Export your keys:

gpg --export -a "email-address-you-used" > public.key  
gpg --export-secret-keys -a "email-address-you-used" > private.key

1. Upload both files as a **project** secret on Semaphore

* Path: /root/public.key
* Path: /root/private.key

1. To import them in your CI job use:

gpg --import /root/public.key  
gpg --import /root/private.key

1. To generate a signature for the artifact (remember to store the signature as an artifact):

gpg --output artifact.txt.sig --detach-sign artifact.txt

1. To verify the signature, use the following command in a job.

gpg --verify artifact.txt.sig artifact.txt

Make sure you have a job to sign and one to verify the signature