

Set up the Nile development environment to help with your cairo contract development.

[Documentation](#)

You can use the gitpod environment

<https://gitpod.io/#https://github.com/ExtropyIO/ZKPBootcamp>

Navigate to the correct directory

```
cd Practicals/Nile/CairoCoin
```

Install dependencies

```
python3 -m venv env
source env/bin/activate
pip install cairo-nile
```

Setup the project

```
nile init
```

Start a local node

```
nile node &
```

Compile the contracts

```
nile compile
```

this compiles all contracts under the contracts directory

Deploy the contract

```
nile deploy contract --alias my_contract
```

(Edit the .env file to provide a different private key, do not use this key elsewhere)

```
nile setup PKEY1
```

Now change the contract

add a variable similar to balance called supply and a function get_supply to return the supply

Re compile and redeploy the contract

```
nile compile  
nile deploy contract --alias my_contract2
```

Call the get_balance and get_supply functions

```
nile call my_contract2 get_balance  
nile call my_contract2 get_supply
```

Try a send transaction using the syntax

```
nile send <private_key_alias> <contract_identifier> <method> [PARAM_1,  
PARAM2...]
```

Deploy to the testnet

Use the --network parameter to deploy to the alpha-goerli test network.

Try adding a constructor to set the initial supply

See https://www.cairo-lang.org/docs/hello_starknet/constructors.html