

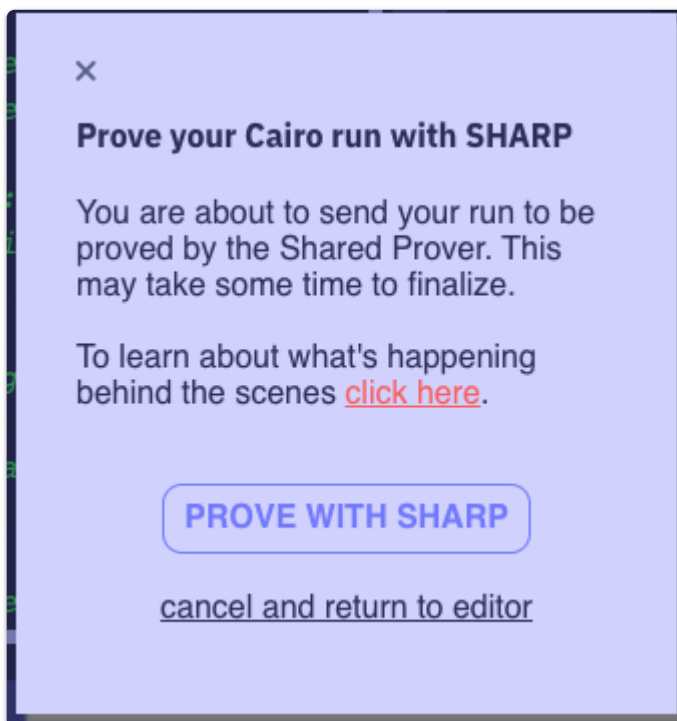
1. Try out the GOL2 on Starknet
Instructions are [here](#)

2. Cairo Playground

Start the playground at
<https://www.cairo-lang.org/playground/>

Try the first 3 challenges : Hello playground, Output and Functions

Try sending your code to the SHARP prover



and find the result on the goerli testnet

SHARP status tracking

Job key: b73c7a58-9ce6-4dcf-ace0-8a275aa3a3ac

Program hash: 0x049a748653632ec760b53cb9830fb30e989b6a12fc8e15345fcb3ebfa79cf376

Fact: 0xf6fe2af6e4ec2f4247e9d536e0b79c2b64538d9da58c7fc9f8417e8ecdf58c9

Current status: Fact registered on-chain!

Created -> Processed -> Train proved -> Registered

Once your fact is registered, you can query it using the isValid() method [here](#).

This page reloads the data every few seconds, you don't have to refresh it manually.

Using the block explorer

<https://voyager.online>

Have a look at some transactions that have been accepted on L1

Environment on gitpod

I have set up an environment on gitpod, please make sure this works for you

Go to <http://gitpod.io>

and use the repo <https://github.com/ExtropyIO/ZKPBootcamp/>

or go direct to URL

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

Then follow the instructions in the Practicals/Cairo1 directory to setup the environment.

3. Taking our initial program and use either the playground or gitpod

```
%builtins output

from starkware.cairo.common.serialize import serialize_word

func main{output_ptr : felt*}():
    serialize_word(1234)
    serialize_word(4321)
    return ()
end
```

Try adjusting the output amounts (you can use literals) to give investigate division
try :

1. 6 divided by 3

2. 7 divided by 3

4. Write a function to add 3 numbers and return the result

5. Checking the correctness of your computation on the shared prover (SHARP)

```
%builtins output

func main(output_ptr : felt*) -> (output_ptr : felt*):
    alloc_locals
    local x
    %{ ids.x = program_input['x'] %}

    # Add assert statement here
    # to show x is a root
    return (output_ptr=output_ptr + 1)
end
```