

Optimisation Game Instructions

1. Use gitpod to create a workspace
<https://github.com/ExtropyIO/Academy> (<https://github.com/ExtropyIO/Academy>)
2. Open a terminal go to the GasOptimisation directory
3. Run `npm i` to install the dependencies
4. Run `npm run hardhat test` to run the tests and get a gas usage report

```
Compilation finished successfully

Gas1
  ✓ Check that admins have been added
  ✓ Checks that the total supply is 10000
  ✓ Checks a transfer
  ✓ Checks an update
  ✓ Checks for events
  ✓ Checks for admin
  ✓ Ensure trading mode is set

-----|-----|-----|-----|
| Solc version: 0.8.0 | Optimizer enabled: false | Runs: 200 | Block limit: 30000000 gas |
-----|-----|-----|-----|
| Methods |
-----|-----|-----|-----|
| Contract | Method | Min | Max | Avg | # calls | gas (avg) |
-----|-----|-----|-----|
| GasContract | transfer | 145438 | 196762 | 169880 | 14 | - |
| GasContract | updatePayment | - | - | 190477 | 2 | - |
| Deployments |
-----|-----|-----|-----|
| GasContract | - | - | - | 3337354 | 11.1 % | - |
-----|-----|-----|-----|

7 passing (2s)
```

The aim of the game is to reduce the Average figures for contract deployment and transfer and updatePayment functions as much as possible.

You can change the contract as much as you like.

You **cannot** change the tests, and all the tests must pass.