08-第八节 写入链上数据

实验目的

- 掌握链上数据的写入方式；

实验环境

- Node.js，版本v14及以上

BSC Testnet

RPC：http://data-seed-prebsc-1-s2.binance.org:8545
ChainID：97
Faucet：https://testnet.binance.org/faucet-smart/

Heco Testnet

RPC：https://http-testnet.hecochain.com
ChainID：256
Faucet：https://scan-testnet.hecochain.com/faucet

Polygon Testnet

RPC：https://rpc-mumbai.maticvigil.com/
ChainID：80001
Faucet：https://faucet.polygon.technology/

以上测试链任选一个进行实验即可。

实验内容

1. 在本地安装node.js

```
> node -v
v16.15.1
```

2. 在本地新建目录，并使用 `npm init` 进行初始化；

实验内容

```
❯ npm init
This utility will walk you through creating a package.json file.
It only covers the most common items, and tries to guess sensible defaults

See `npm help init` for definitive documentation on these fields
and exactly what they do.

Use `npm install <pkg>` afterwards to install a package and
save it as a dependency in the package.json file.

Press ^C at any time to quit.
package name: (course07)
version: (1.0.0)
description:
entry point: (index.js)
test command:
git repository:
keywords:
author:
license: (ISC)
About to write to /Users/liangpeili/Projects/cbi/DApp-and-Smart-Contract-F

{
  "name": "course07",
  "version": "1.0.0",
  "description": "",
  "main": "index.js",
  "scripts": {
    "test": "echo \"Error: no test specified\" && exit 1"
  },
  "author": "",
  "license": "ISC"
}

Is this OK? (yes) yes
```

3. 安装ethers.js

```
npm install --save ethers
```

```
> npm install --save ethers

added 45 packages, and audited 46 packages in 9s

31 packages are looking for funding
  run `npm fund` for details

found 0 vulnerabilities
```

4. 使用ethers.js部署一个ERC20合约到以上任意测试链；
   要求：ERC20的Name为自己的全名；Symbol为自己名字的缩写。

5. 使用ethers.js 给地址文件里的100个地址每个地址空投201个币；

实验报告内容

提交源代码，并且在实验报告开头中写明：姓名/学号/班级。

实验报告提交方式

实验报告完成后发送到邮箱 cbireport@163.com，标题为 学号-班级-姓名-第八次实验报告