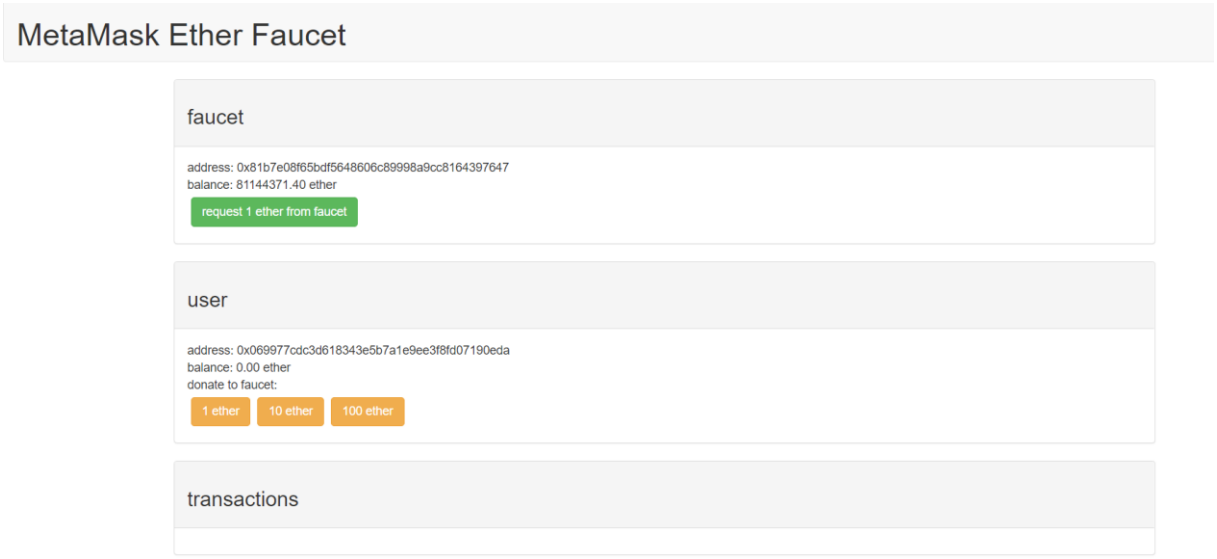
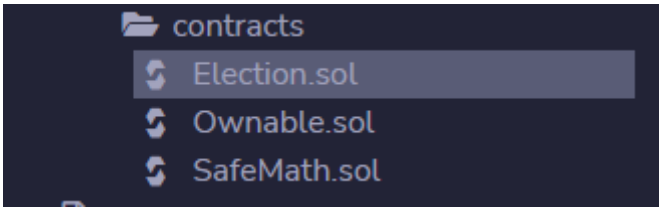
**TP – Blockchain**

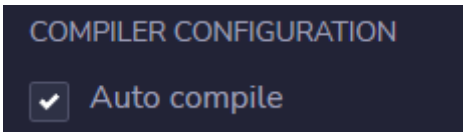
1.d Réception d'1eth.




1.j Import des fichier solidity.

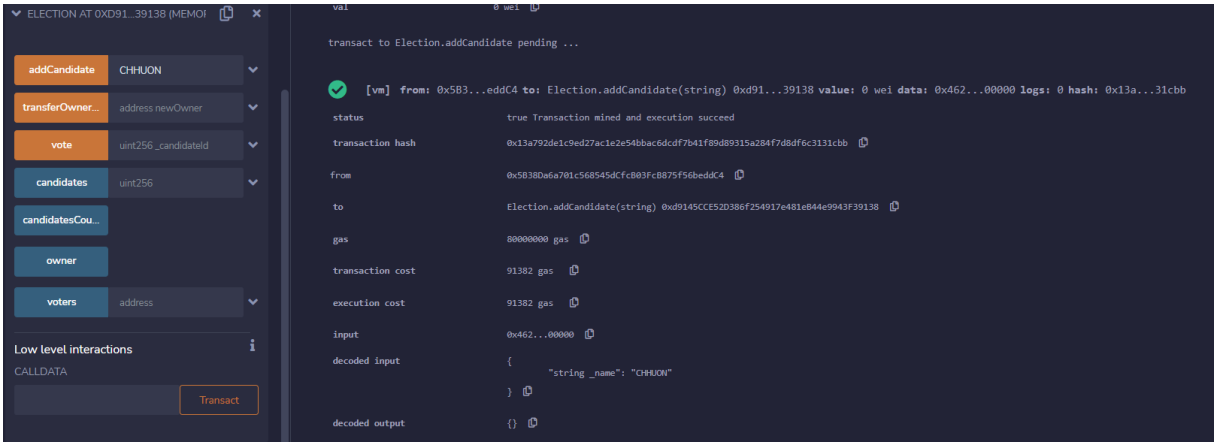



1.l Déploiement et compilation du contrat.




Les frais de transaction ne sont pas les mêmes, elles sont de 554494 gaz qui sont à convertir.

1.o




1.p


1.q

1.r


addCandidate
CROCO
transferOwner...
address newOwner
vote
uint256 _candidateId
candidates
2
0: uint256: id 2
1: string: name CROCO
2: uint256: voteCount 0
candidatesCou...
owner
voters
address
call [call] from: 0x5B38Da6a701c568545dCfcB03FcB875f56beddC4 to: Election.candidates(uint256) data: 0x347...00002
from 0x5B38Da6a701c568545dCfcB03FcB875f56beddC4
to Election.candidates(uint256) 0xd9145CCE52D386f254917e481eB44e9943F39138
execution cost 28814 gas (Cost only applies when called by a contract)
input 0x347...00002
decoded input { "uint256 ": "2" }
decoded output { "0": "uint256: id 2", "1": "string: name CROCO", "2": "uint256: voteCount 0" }

1.s


1: string: name CROCO
2: uint256: voteCount 0
candidatesCou...
owner
0: address: 0x5B38Da6a701c568545dCfcB03FcB875f56beddC4
voters
address
Low level interactions
CALLDATA
Transact
call [call] from: 0x5B38Da6a701c568545dCfcB03FcB875f56beddC4 to: Election.owner() data: 0x8da...5cb5b
from 0x5B38Da6a701c568545dCfcB03FcB875f56beddC4
to Election.owner() 0xd9145CCE52D386f254917e481eB44e9943F39138
execution cost 23430 gas (Cost only applies when called by a contract)
input 0x8da...5cb5b
decoded input {}
decoded output { "0": "address: 0x5B38Da6a701c568545dCfcB03FcB875f56beddC4" }
logs []

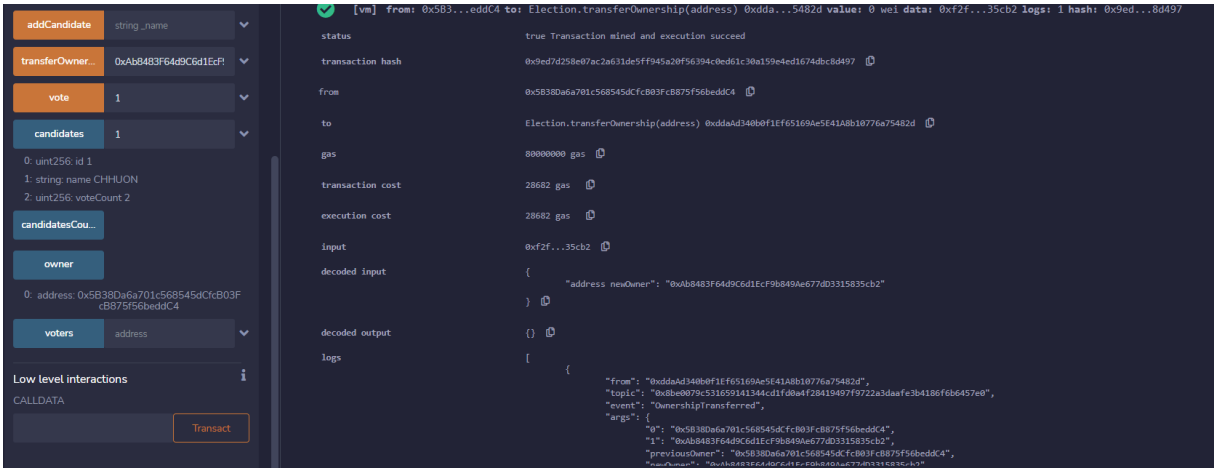
1.t


addCandidate
string _name
transferOwner...
address newOwner
vote
1
candidates
uint256
0: uint256: id 2
1: string: name CROCO
2: uint256: voteCount 0
candidatesCou...
owner
0: address: 0x5B38Da6a701c568545dCfcB03FcB875f56beddC4
voters
address
Low level interactions
CALLDATA
Transact
vm [vm] from: 0x5B3...eddC4 to: Election.vote(uint256) 0xd91...39138 value: 0 wei data: 0x012...00001 logs: 1 hash: 0xf15...897b5
status true Transaction mined and execution succeed
transaction hash 0xf15ee719e9080e1fc78fe6ba84a8778eb6111d66fa98e6b0626dc520583897b5
from 0x5B38Da6a701c568545dCfcB03FcB875f56beddC4
to Election.vote(uint256) 0xd9145CCE52D386f254917e481eB44e9943F39138
gas 80000000 gas
transaction cost 69467 gas
execution cost 69467 gas
input 0x012...00001
decoded input { "uint256 _candidateId": "1" }
decoded output {}
logs [ { "from": "0xd9145CCE52D386f254917e481eB44e9943F39138", "topic": "0xfff3c900d938d21d0990d786e819f29b8d05c1ef587b462b939609625b684b16", "event": "votedEvent", "args": { "0": "1", "_candidateId": "1" } }

1.u Le vote a bien été pris en compte et qu'il est de 1 pour le candidat CHHUON.


1.v On peut voir que le vote a été pris en compte et qu'il est de 2 pour le candidat CHHUON.


1.w On transfère la propriété su contrat en utilisant la fonction « transferOwnership » et en entrant l'identifiant du wallet du nouveau propriétaire.




1.x

On peut limiter la visibilité avec la mention « onlyOwner ».

1.y

```
function addCandidate (string memory _name) public onlyOwner {
```

Avec le wallet du propriétaire l'action addCandidate est bien effectué :


Avec un autre wallet l'action addCandidate est refusé :