Background Assignment

Github Link: https://github.com/joellje/zku.ONE
Course registration email: joellimjieen@hotmail.com
Discord username: joellje#8135

Before Optimization

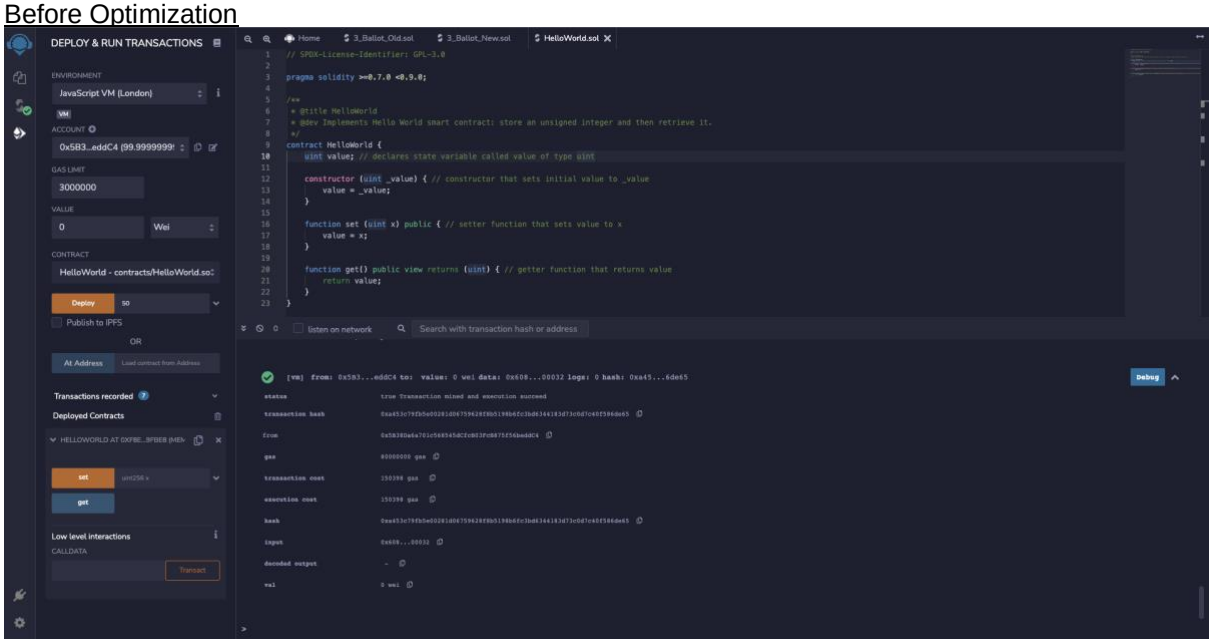

Figure 1: HelloWorld.sol and deployment

After Optimization

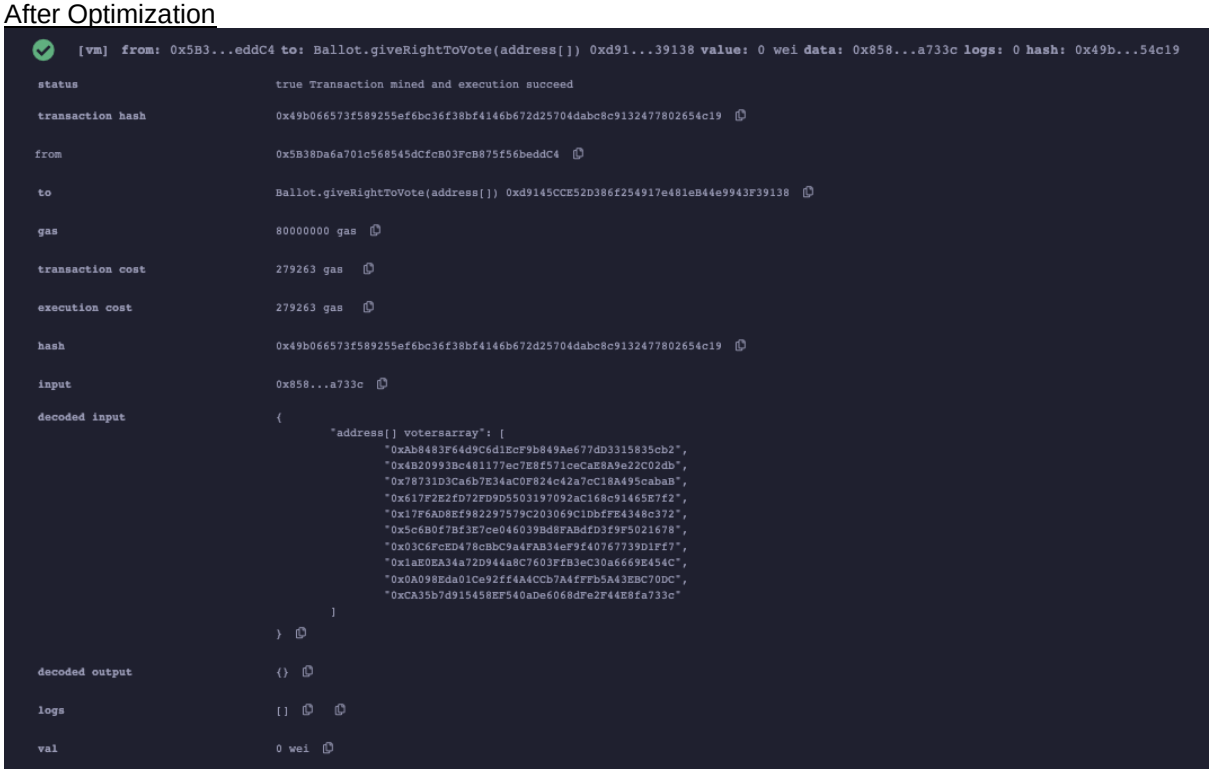

Figure 2: 10 Addresses using 1 Transaction (new version)

Transaction Cost: 279263 gas
Execution Cost: 279263 gas

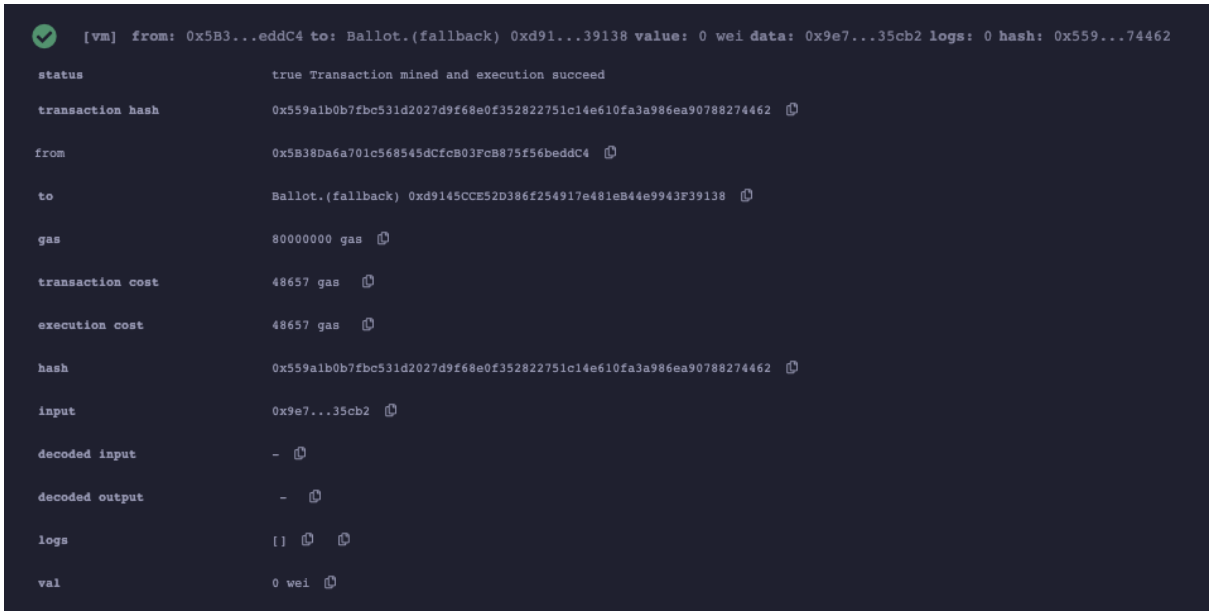

Figure 3: 1 Address using 1 Transaction (old version)

Transaction Cost: 48657 gas
Execution Cost: 48657 gas
The Transaction Cost is the same for each transaction. Total Transaction Cost for giving 10 voters the right to vote by calling the “giveRightToVote” function 10 times would be 486570 gas. This is almost double the 279263 gas required with the improved script.