## Report Lesson 4: Group 6

In the next contract address we can see the first 8 transactions that were the result of the first experimentation of the group. The first transaction was sent by the address 0x2d31C441bcc39A107E5648Ae2A246B4b939795c0 to deploy the contract. The contract is deployed (instantiated) in the address 0xe4e6801e89540247c71628b63c134c5ee60f5acc. When the contract is instantiated the constructor is executed, in it the private state variable test is set to Hello World and the public state variable owner is set to the sender of the deploy transaction. In the <u>second transaction</u> the owner of the contract set the text to his name and the transaction success. In this case the setText method is called and the onlyOwner modifier is executed. The require function in the onlyOwner is executed testing that the sender of the second transaction is the owner and after that the rest of the body in the setText function is executed, setting the text correctly. In the third transaction the ownership of the contract is transferred to address 0x5f0b5C7D5939D6fEd09B27c7449F4D7d813AEfe4. In this case the method transferOwnership is executed, the modifier onlyOwner is executed first, the require function success and the rest of the body of the transferOwnership success too. In the <u>transaction number four</u> the setText method is executed again by the new owner. Now is the same

case that <u>transaction two</u>, the transaction executed successful. In the <u>transaction number five</u> a new owner is set executing the <u>transferOwnership</u> method, this is the same case that <u>transaction number three</u>. In the <u>transaction number six</u> a a new text is set, this case is the same that <u>transaction number two</u>. In the <u>transaction number eleven</u> something interested happen. The <u>setText</u> method is executed by and address that is not the owner, in this case the address

0x5f0b5C7D5939D6fEd09B27c7449F4D7d813AEfe4 . In this case the modifier is executed and failed due that the sender of the transaction to executed the method is not the owner. The execution is reverted. In the <u>transaction number eight</u> some similar to previous transaction occurs, somebody that is not the owner try to set the owner to himself executing the method <u>transferOwnership</u>. Again, the modifier execute the <u>require</u> function and this revert with an error.