Hardhat Simple Storage

```
1    // imports
2    const { ethers, run, network } = require("hardhat")
3
4    // async main
5    async function main() {
6      const SimpleStorageFactory = await ethers.getContractFactory("SimpleStorage")
7      console.log("Deploying contract...")
8      const simpleStorage = await SimpleStorageFactory.deploy()
9      await simpleStorage.deployed()
10     console.log(`Deployed contract to: ${simpleStorage.address}`)
11     // what happens when we deploy to our hardhat network?
12     if (network.config.chainId === 4 && process.env.ETHERSCAN_API_KEY) {
13       console.log("Waiting for block confirmations...")
14       await simpleStorage.deployTransaction.wait(6)
15       await verify(simpleStorage.address, [])
16     }
17
18     const currentValue = await simpleStorage.retrieve()
19     console.log(`Current Value is: ${currentValue}`)
20
21     // Update the current value
22     const transactionResponse = await simpleStorage.store(7)
23     await transactionResponse.wait(1)
24     const updatedValue = await simpleStorage.retrieve()
25     console.log(`Updated Value is: ${updatedValue}`)
26   }
27
28   // async function verify(contractAddress, args) {
29   const verify = async (contractAddress, args) => {
30     console.log("Verifying contract...")
31     try {
32       await run("verify:verify", {
33         address: contractAddress,
34         constructorArguments: args,
35       })
36     } catch (e) {
37       if (e.message.toLowerCase().includes("already verified")) {
```