Run the testrpc in the terminal with:

```
testrpc
```

Create a new .sol file in REMIX IDE with:

```
pragma solidity ^0.4.21;

contract Coursetro_lab4 {
    string fName;
    uint age;

    event Instructor(
        string name,
        uint age
    );

    function setInstructor(string _fName, uint _age) public {
        fName = _fName;
        age = _age;
        // To actually use the event, we need to call the event and pass
        // in the submitted name and age within the existing
        // setInstructor() method, like so:
        emit Instructor(_fName, _age);
    }

    function getInstructor() public constant returns (string, uint) {
        return (fName, age);
    }
}
```

Also create a new .html file with (change to your own address and ABI code):

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <meta http-equiv="X-UA-Compatible" content="ie=edge">
    <title>Document</title>
    <link rel="stylesheet" type="text/css" href="main_lab4.css">
    <script src="./node_modules/web3/dist/web3.min.js"></script>
</head>
<body>
    <div class="container">
        <h1>Coursetro Instructor</h1>
        <h2 id="instructor">
```

```
<img id="loader" src="https://loading.io/spinners/double-ring/lg.double-ring-spinner.gif">
            </h2>
            <label for="name" class="col-lg-2 control-label">Instructor Name</label>
            <input id="name" type="text">
            <label for="name" class="col-lg-2 control-label">Instructor Age</label>
            <input id="age" type="text">
            <button id="button">Update Instructor</button>
        </div>
        <script src="https://code.jquery.com/jquery-3.2.1.slim.min.js"></script>
        <script>
        var web3;
        if (typeof web3 !== 'undefined') {
            web3 = new Web3(web3.currentProvider);
        } else {
            // set the provider you want from Web3.providers
            web3 = new Web3(new Web3.providers.HttpProvider("http://localhost:8545"));
            if(!web3.isConnected()) {
                    console.log('not-connected');
             } else {
                  console.log('connected');
             }
        }

        web3.eth.defaultAccount = web3.eth.accounts[0];
        // var CoursetroContract = web3.eth.contract('PASTE ABI CODE HERE');
        var CoursetroContract = web3.eth.contract([ { "constant": false, "inputs":
                [ { "name": "_fName", "type": "string" }, { "name": "_age", "type":
                "uint256" } ], "name": "setInstructor", "outputs": [], "payable":
                false, "stateMutability": "nonpayable", "type": "function" }, {
                "constant": true, "inputs": [], "name": "getInstructor", "outputs":
                [ { "name": "", "type": "string" }, { "name": "", "type": "uint256" } ],
                "payable": false, "stateMutability": "view", "type": "function" },
                { "anonymous": false, "inputs": [ { "indexed": false, "name": "name",
                "type": "string" }, { "indexed": false, "name": "age", "type":
                "uint256" } ], "name": "Instructor", "type": "event" } ]);

        console.log('created CoursetroContract');
        // var Coursetro = CoursetroContract.at('PASTE CONTRACT ADDRESS HERE');
        console.log('Creating Coursetro');
        var Coursetro = CoursetroContract.at('0xce3a32a54dbb4ff2f26d80fc2261ed4b02292ca2');
        console.log(Coursetro);

// Since we no longer need to call Coursetro.getInstructor(),
// so we're going to remove that.
```

```
////////////////////////////////////////////////////////
//        Coursetro.getInstructor(function(error, result){
//            console.log('Inside Coursetro.getInstructor');
//
//            if (!error)
//            {
//                console.log('Inside !error');
//                $("#instructor").html(result[0]+' ('+result[1]+' years old)');
//                console.log(result);
//            }
//            else
//                console.log(error);
//        });

        // Replace the Coursetro.getInstructor() lines by creating an
        //          instructorEvent
        var instructorEvent = Coursetro.Instructor();

        // Use the .watch() method on instructorEvent with a callback.
        instructorEvent.watch(function(error, result){
            if (!error)
            {
                $("#loader").hide();
                $("#instructor").html(result.args.name
                        + ' (' + result.args.age + ' years old)');
            } else {
                $("#loader").hide();
                console.log(error);
            }
        });


        // var instructorEvent = Coursetro.Instructor({}, {fromBlock: 1, toBlock: 'latest'});
        // instructorEvent.watch(function(error, result){
        //          alert(1);
        // });

        $("#button").click(function() {
            console.log('Inside click');
            $("#loader").show();
            Coursetro.setInstructor($("#name").val(), $("#age").val());
        });
        </script>
</body>
```

```
</html>
```

Create a .css file for the layout with:

```
body {
  background-color:#F0F0F0;
  padding: 2em;
  font-family: 'Raleway','Source Sans Pro', 'Arial';
}
.container {
  width: 50%;
  margin: 0 auto;
}
label {
  display:block;
  margin-bottom:10px;
}
input {
  padding:10px;
  width: 50%;
  margin-bottom: 1em;
}
button {
  margin: 2em 0;
  padding: 1em 4em;
  display:block;
}
#instructor {
  padding:1em;
  background-color:#fff;
  margin: 1em 0;
}
#loader {
    width: 100px;
    display:none;
}
```

In SOLIDITY COMPILER page, click Compile xxx.sol
Then we can copy the ABI code

Change the ENVIRONMENT to Web3 Provider in DEPLOY & RUN TRANSACTIONS, Change the Web3 Provider Endpoint to http://localhost:8545 , after click Deploy we will get a Deployed Contracts, we click to copy this as our address

If all stuff going right, we enter the data in our .html web page, we can click getInstructor to get our input from .html web page