

Code Snippet

Below is the code snippet from the Instructor lesson. You can copy and use it as a reference.

To use this code, copy the code and paste it in Node-RED > (Burger menu) Import

```
[
  {
    "id": "36e7eaac74bf7235",
    "type": "tab",
    "label": "Arrays",
    "disabled": false,
    "info": "",
    "env": []
  },
  {
    "id": "f1c1ed078fb156a6",
    "type": "inject",
    "z": "36e7eaac74bf7235",
    "name": "",
    "props": [
      {
        "p": "payload"
      },
      {
        "p": "topic",
        "vt": "str"
      }
    ]
  },
]
```

```
"repeat": "",
"crontab": "",
"once": false,
"onceDelay": 0.1,
"topic": "",
"payload": "",
"payloadType": "date",
"x": 140,
"y": 100,
"wires": [
  [
    "f235640cf36a0d85"
  ]
]
},
{
  "id": "f235640cf36a0d85",
  "type": "function",
  "z": "36e7eaac74bf7235",
  "name": "function 41",
  "func": "var arr = [23,12,78,56.345,'Rajvir'];\narr[0] = 'Singh';\narr[1] = 34.23;\narr[3] = 100;\narr[5] = 'Code and Compile';\narr[6] = 'Germany';\nmsg.payload = arr[arr.length-2];\nreturn msg;",
  "outputs": 1,
  "noerr": 0,
  "initialize": "",
  "finalize": "",
  "libs": [],
  "x": 330,
```

```
"y": 100,
"wires": [
  [
    "d69f030b5b73468e"
  ]
]
},
{
  "id": "d69f030b5b73468e",
  "type": "debug",
  "z": "36e7eaac74bf7235",
  "name": "debug 27",
  "active": false,
  "tosidebar": true,
  "console": false,
  "tostatus": false,
  "complete": "false",
  "statusVal": "",
  "statusType": "auto",
  "x": 560,
  "y": 100,
  "wires": []
},
{
  "id": "2089f36a59fc875b",
  "type": "function",
  "z": "36e7eaac74bf7235",
  "name": "function 42",
```

```
"func": "var arr1 = [23,12,78,56.345,'Rajvir'];\nvar arr2 = [];\nmsg.payload = arr2.length\n> 0;\nreturn msg;",
"outputs": 1,
"noerr": 0,
"initialize": "",
"finalize": "",
"libs": [],
"x": 330,
"y": 200,
"wires": [
  [
    "08730c2470ac1c3d"
  ]
]
},
{
  "id": "1161fc46694ee307",
  "type": "inject",
  "z": "36e7eaac74bf7235",
  "name": "",
  "props": [
    {
      "p": "payload"
    },
    {
      "p": "topic",
      "vt": "str"
    }
  ]
}
```

```
],  
  "repeat": "",  
  "crontab": "",  
  "once": false,  
  "onceDelay": 0.1,  
  "topic": "",  
  "payload": "",  
  "payloadType": "date",  
  "x": 140,  
  "y": 200,  
  "wires": [  
    [  
      "2089f36a59fc875b"  
    ]  
  ]  
},  
{  
  "id": "08730c2470ac1c3d",  
  "type": "debug",  
  "z": "36e7eaac74bf7235",  
  "name": "debug 28",  
  "active": false,  
  "tosidebar": true,  
  "console": false,  
  "tostatus": false,  
  "complete": "false",  
  "statusVal": "",  
  "statusType": "auto",
```

```
"x": 560,
"y": 200,
"wires": []
},
{
  "id": "43dabb14fdd09423",
  "type": "modbus-read",
  "z": "36e7eaac74bf7235",
  "d": true,
  "name": "",
  "topic": "",
  "showStatusActivities": false,
  "logIOActivities": false,
  "showErrors": false,
  "showWarnings": true,
  "unitid": "",
  "dataType": "Coil",
  "adr": "0",
  "quantity": "5",
  "rate": "1",
  "rateUnit": "s",
  "delayOnStart": false,
  "startDelayTime": "",
  "server": "4ae7466079139286",
  "useIOFile": false,
  "ioFile": "",
  "useIOForPayload": false,
  "emptyMsgOnFail": false,
```

```
"x": 150,
"y": 260,
"wires": [
  [
    "8cc315079af4a64b",
    "f0a9f9fa49c2333d"
  ],
  []
]
},
{
  "id": "8cc315079af4a64b",
  "type": "debug",
  "z": "36e7eaac74bf7235",
  "name": "debug 29",
  "active": false,
  "tosidebar": true,
  "console": false,
  "tostatus": false,
  "complete": "false",
  "statusVal": "",
  "statusType": "auto",
  "x": 560,
  "y": 260,
  "wires": []
},
{
  "id": "f0a9f9fa49c2333d",
```

```
"type": "function",
"z": "36e7eaac74bf7235",
"name": "function 43",
"func": "msg.payload = msg.payload[0];\nreturn msg;",
"outputs": 1,
"noerr": 0,
"initialize": "",
"finalize": "",
"libs": [],
"x": 330,
"y": 300,
"wires": [
  [
    "dd1daabd60717667",
    "f1355a0dbce41a06"
  ]
]
},
{
  "id": "dd1daabd60717667",
  "type": "debug",
  "z": "36e7eaac74bf7235",
  "name": "debug 30",
  "active": false,
  "tosidebar": true,
  "console": false,
  "tostatus": false,
  "complete": "false",
```



```
"statusVal": "",
"statusType": "auto",
"x": 560,
"y": 300,
"wires": []
},
{
  "id": "c3f410c5ebf7c929",
  "type": "ui_slider",
  "z": "36e7eaac74bf7235",
  "name": "",
  "label": "Array element [0]",
  "tooltip": "",
  "group": "97cf247ec312bc7f",
  "order": 1,
  "width": 0,
  "height": 0,
  "passthru": true,
  "outs": "all",
  "topic": "topic",
  "topicType": "msg",
  "min": 0,
  "max": "100",
  "step": 1,
  "className": "",
  "x": 170,
  "y": 400,
  "wires": [
```

```
[
  "2e95cc773ffa1b41"
]
},
{
  "id": "2e95cc773ffa1b41",
  "type": "modbus-write",
  "z": "36e7eaac74bf7235",
  "d": true,
  "name": "",
  "showStatusActivities": false,
  "showErrors": false,
  "showWarnings": true,
  "unitid": "",
  "dataType": "HoldingRegister",
  "adr": "0",
  "quantity": "1",
  "server": "4ae7466079139286",
  "emptyMsgOnFail": false,
  "keepMsgProperties": false,
  "delayOnStart": false,
  "startDelayTime": "",
  "x": 400,
  "y": 400,
  "wires": [
    [],
    []
  ]
}
```

```
]
},
{
  "id": "f1355a0dbce41a06",
  "type": "ui_led",
  "z": "36e7eaac74bf7235",
  "order": 1,
  "group": "97cf247ec312bc7f",
  "width": 0,
  "height": 0,
  "label": "",
  "labelPlacement": "left",
  "labelAlignment": "left",
  "colorForValue": [
    {
      "color": "#ff0000",
      "value": "false",
      "valueType": "bool"
    },
    {
      "color": "#008000",
      "value": "true",
      "valueType": "bool"
    }
  ],
  "allowColorForValueInMessage": false,
  "shape": "circle",
  "showGlow": true,
```

```
"name": "",
"x": 550,
"y": 340,
"wires": []
},
{
  "id": "9bf6244cedda8cfa",
  "type": "inject",
  "z": "36e7eaac74bf7235",
  "name": "",
  "props": [
    {
      "p": "payload"
    },
    {
      "p": "topic",
      "vt": "str"
    }
  ],
  "repeat": "",
  "crontab": "",
  "once": false,
  "onceDelay": 0.1,
  "topic": "",
  "payload": "",
  "payloadType": "date",
  "x": 140,
  "y": 500,
```

```
"wires": [  
  [  
    "1bca95df8672f922"  
  ]  
]  
,  
{  
  "id": "1bca95df8672f922",  
  "type": "function",  
  "z": "36e7eaac74bf7235",  
  "name": "function 44",  
  "func": "var arr = ['Rajvir',22];\nnarr.push('Germany');\nmsg.payload = arr;\nreturn  
msg;",  
  "outputs": 1,  
  "noerr": 0,  
  "initialize": "",  
  "finalize": "",  
  "libs": [],  
  "x": 350,  
  "y": 500,  
  "wires": [  
    [  
      "9332415083d8ab55"  
    ]  
  ]  
},  
{  
  "id": "9332415083d8ab55",
```

```
"type": "debug",
"z": "36e7eaac74bf7235",
"name": "debug 31",
"active": true,
"tosidebar": true,
"console": false,
"tostatus": false,
"complete": "false",
"statusVal": "",
"statusType": "auto",
"x": 540,
"y": 500,
"wires": []
},
{
  "id": "d44d1301da581c90",
  "type": "function",
  "z": "36e7eaac74bf7235",
  "name": "function 45",
  "func": "var arr = context.get('contextArr') || [];\nvar randomValue =\nMath.floor(Math.random()*100);\narr.push(randomValue);\ncontext.set('contextArr',arr);\nreturn msg;",
  "outputs": 1,
  "noerr": 0,
  "initialize": "",
  "finalize": "",
  "libs": [],
  "x": 350,
  "y": 560,
```

```
"wires": [  
  [  
    "fac311f5f7a949dc"  
  ]  
]  
,  
{  
  "id": "8f800b226022d9d4",  
  "type": "inject",  
  "z": "36e7eaac74bf7235",  
  "name": "",  
  "props": [  
    {  
      "p": "payload"  
    },  
    {  
      "p": "topic",  
      "vt": "str"  
    }  
  ],  
  "repeat": "",  
  "crontab": "",  
  "once": false,  
  "onceDelay": 0.1,  
  "topic": "",  
  "payload": "",  
  "payloadType": "date",  
  "x": 140,
```

```
"y": 560,
"wires": [
  [
    "d44d1301da581c90"
  ]
]
},
{
  "id": "fac311f5f7a949dc",
  "type": "debug",
  "z": "36e7eaac74bf7235",
  "name": "debug 32",
  "active": true,
  "tosidebar": true,
  "console": false,
  "tostatus": false,
  "complete": "false",
  "statusVal": "",
  "statusType": "auto",
  "x": 540,
  "y": 560,
  "wires": []
},
{
  "id": "05d61de376516528",
  "type": "inject",
  "z": "36e7eaac74bf7235",
  "name": "",
```



```
"props": [  
  {  
    "p": "payload"  
  },  
  {  
    "p": "topic",  
    "vt": "str"  
  }  
],  
"repeat": "",  
"crontab": "",  
"once": false,  
"onceDelay": 0.1,  
"topic": "",  
"payload": "",  
"payloadType": "date",  
"x": 140,  
"y": 640,  
"wires": [  
  [  
    "666d05d4560992da"  
  ]  
]  
},  
{  
  "id": "666d05d4560992da",  
  "type": "function",  
  "z": "36e7eaac74bf7235",
```

```
"name": "function 46",

"func": "var arr1 = ['Rajvir', 22];\nvar arr2 = ['Germany', 'Code and Compile',
88662]\nvar arr3 = arr1.concat(arr2);\narr3.pop();\narr3.shift();\nmsg.payload =
arr3.find(e=> e==='Germany');\nreturn msg;",

"outputs": 1,

"noerr": 0,

"initialize": "",

"finalize": "",

"libs": [],

"x": 330,

"y": 640,

"wires": [

  [

    "4730aacc705c1087"

  ]

]

},

{

  "id": "4730aacc705c1087",

  "type": "debug",

  "z": "36e7eaac74bf7235",

  "name": "debug 33",

  "active": true,

  "tosidebar": true,

  "console": false,

  "tostatus": false,

  "complete": "false",

  "statusVal": "",

  "statusType": "auto",
```

```
"x": 540,
"y": 640,
"wires": []
},
{
  "id": "6df4049098cf166c",
  "type": "function",
  "z": "36e7eaac74bf7235",
  "name": "function 47",
  "func": "var arr1 = ['Rajvir', 22];\nvar arr2 = ['Germany', 'Code and Compile',22,88662]\nvar arr3 = arr1.concat(arr2);\nmsg.payload = arr3.indexOf(arr3.find(e=>e==='London')));\nreturn msg;",
  "outputs": 1,
  "noerr": 0,
  "initialize": "",
  "finalize": "",
  "libs": [],
  "x": 330,
  "y": 700,
  "wires": [
    [
      "516ef3aab7701a43"
    ]
  ]
},
{
  "id": "cd9dcd951c4976ef",
  "type": "inject",
  "z": "36e7eaac74bf7235",
```

```
"name": "",
"props": [
  {
    "p": "payload"
  },
  {
    "p": "topic",
    "vt": "str"
  }
],
"repeat": "",
"crontab": "",
"once": false,
"onceDelay": 0.1,
"topic": "",
"payload": "",
"payloadType": "date",
"x": 140,
"y": 700,
"wires": [
  [
    "6df4049098cf166c"
  ]
]
},
{
  "id": "516ef3aab7701a43",
  "type": "debug",
```

```
"z": "36e7eaac74bf7235",
"name": "debug 34",
"active": true,
"tosidebar": true,
"console": false,
"tostatus": false,
"complete": "false",
"statusVal": "",
"statusType": "auto",
"x": 540,
"y": 700,
"wires": []
},
{
  "id": "4ae7466079139286",
  "type": "modbus-client",
  "name": "Localhost-PC",
  "clienttype": "tcp",
  "bufferCommands": true,
  "stateLogEnabled": false,
  "queueLogEnabled": false,
  "failureLogEnabled": true,
  "tcpHost": "127.0.0.1",
  "tcpPort": "502",
  "tcpType": "DEFAULT",
  "serialPort": "/dev/ttyUSB",
  "serialType": "RTU-BUFFERD",
  "serialBaudrate": "9600",
```

```
"serialDatabits": "8",
"serialStopbits": "1",
"serialParity": "none",
"serialConnectionDelay": "100",
"serialAsciiResponseStartDelimiter": "0x3A",
"unit_id": "1",
"commandDelay": "1",
"clientTimeout": "1000",
"reconnectOnTimeout": true,
"reconnectTimeout": "2000",
"parallelUnitIdsAllowed": true,
"showWarnings": true,
"showLogs": true
},
{
  "id": "97cf247ec312bc7f",
  "type": "ui_group",
  "name": "Default",
  "tab": "e47ee7fd1941f8ef",
  "order": 4,
  "disp": true,
  "width": "6",
  "collapse": false,
  "className": ""
},
{
  "id": "e47ee7fd1941f8ef",
  "type": "ui_tab",
```

```
"name": "Array values",  
"icon": "dashboard",  
"order": 2,  
"disabled": false,  
"hidden": false  
}  
]
```