

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": "b987205464e9af0a",
    "type": "tab",
    "label": "Variables and Operators",
    "disabled": false,
    "info": "",
    "env": []
  },
  {
    "id": "f15bb5356b6cd7b2",
    "type": "inject",
    "z": "b987205464e9af0a",
    "name": "",
    "props": [
      {
        "p": "payload"
      },
      {
        "p": "topic",
        "vt": "str"
      }
    ],
    "repeat": "",
    "crontab": "",
    "once": false,
    "onceDelay": 0.1,
    "topic": "",
    "payload": "",
    "payloadType": "date",
    "x": 160,
    "y": 100,
    "wires": [
      [
        "d67c3db87c776883"
      ]
    ]
  }
]
```

```

    "id": "d67c3db87c776883",
    "type": "function",
    "z": "b987205464e9af0a",
    "name": "function 30",
    "func": "msg.payload = Math.floor(Math.random()*100);\nreturn msg;",
    "outputs": 1,
    "noerr": 0,
    "initialize": "",
    "finalize": "",
    "libs": [],
    "x": 370,
    "y": 100,
    "wires": [
      [
        "c1de27d59eec593c"
      ]
    ]
  },
  {
    "id": "c1de27d59eec593c",
    "type": "debug",
    "z": "b987205464e9af0a",
    "name": "debug 19",
    "active": true,
    "tosidebar": true,
    "console": false,
    "tostatus": false,
    "complete": "false",
    "statusVal": "",
    "statusType": "auto",
    "x": 600,
    "y": 100,
    "wires": []
  },
  {
    "id": "508b1e4fb735ad07",
    "type": "function",
    "z": "b987205464e9af0a",
    "name": "function 31",
    "func": "var x = 156;\nvar x = 45;\n",
    "outputs": 1,
    "noerr": 0,
    "initialize": "",
    "finalize": "",
    "libs": [],
    "x": 370,
    "y": 180,

```

```
    "wires": [
      []
    ]
  },
  {
    "id": "0346e99dafc93b72",
    "type": "inject",
    "z": "b987205464e9af0a",
    "name": "",
    "props": [
      {
        "p": "payload"
      },
      {
        "p": "topic",
        "vt": "str"
      }
    ],
    "repeat": "",
    "crontab": "",
    "once": false,
    "onceDelay": 0.1,
    "topic": "",
    "payload": "",
    "payloadType": "date",
    "x": 160,
    "y": 180,
    "wires": [
      [
        "508b1e4fb735ad07"
      ]
    ]
  },
  {
    "id": "f27c41e69267c417",
    "type": "inject",
    "z": "b987205464e9af0a",
    "name": "",
    "props": [
      {
        "p": "payload"
      },
      {
        "p": "topic",
        "vt": "str"
      }
    ],
  },
```

```

    "repeat": "",
    "crontab": "",
    "once": false,
    "onceDelay": 0.1,
    "topic": "",
    "payload": "",
    "payloadType": "date",
    "x": 160,
    "y": 260,
    "wires": [
      [
        "Odd053e0b17e1e5a"
      ]
    ]
  },
  {
    "id": "Odd053e0b17e1e5a",
    "type": "function",
    "z": "b987205464e9af0a",
    "name": "function 32",
    "func": "var sampleString1 = 'New \\nline';\\n\\nmsg.payload = sampleString1;\\nreturn
msg;",
    "outputs": 1,
    "noerr": 0,
    "initialize": "",
    "finalize": "",
    "libs": [],
    "x": 370,
    "y": 260,
    "wires": [
      [
        "279ca312230c5e5e"
      ]
    ]
  },
  {
    "id": "279ca312230c5e5e",
    "type": "debug",
    "z": "b987205464e9af0a",
    "name": "debug 20",
    "active": true,
    "tosidebar": true,
    "console": false,
    "tostatus": false,
    "complete": "false",
    "statusVal": "",
    "statusType": "auto",

```

```

    "x": 600,
    "y": 260,
    "wires": []
  },
  {
    "id": "6c2bc84537dc9741",
    "type": "function",
    "z": "b987205464e9af0a",
    "name": "function 33",
    "func": "console.log(1);\nconsole.log(1.5);\nconsole.log(1.5e4);\nconsole.log(0o10);\n//octal\nconsole.log(0xFF); //Hexadecimal\nconsole.log(0b1111); //binary",
    "outputs": 1,
    "noerr": 0,
    "initialize": "",
    "finalize": "",
    "libs": [],
    "x": 370,
    "y": 300,
    "wires": [
      []
    ]
  },
  {
    "id": "761d364b58293e6b",
    "type": "inject",
    "z": "b987205464e9af0a",
    "name": "",
    "props": [
      {
        "p": "payload"
      },
      {
        "p": "topic",
        "vt": "str"
      }
    ],
    "repeat": "",
    "crontab": "",
    "once": false,
    "onceDelay": 0.1,
    "topic": "",
    "payload": "",
    "payloadType": "date",
    "x": 160,
    "y": 300,
    "wires": [
      [

```

```

        "6c2bc84537dc9741"
    ]
}
{
    "id": "ca7be038d725ab46",
    "type": "function",
    "z": "b987205464e9af0a",
    "name": "function 34",
    "func": "var bool2 = false;\nvar bool1 = true;\nconsole.log(bool1,bool2)\nreturn msg;",
    "outputs": 1,
    "noerr": 0,
    "initialize": "",
    "finalize": "",
    "libs": [],
    "x": 370,
    "y": 360,
    "wires": [
        []
    ]
},
{
    "id": "fb876e83d86288be",
    "type": "inject",
    "z": "b987205464e9af0a",
    "name": "",
    "props": [
        {
            "p": "payload"
        },
        {
            "p": "topic",
            "vt": "str"
        }
    ],
    "repeat": "",
    "crontab": "",
    "once": false,
    "onceDelay": 0.1,
    "topic": "",
    "payload": "",
    "payloadType": "date",
    "x": 160,
    "y": 360,
    "wires": [
        [
            "ca7be038d725ab46"
        ]
    ]
}

```

```

    ]
  ],
  {
    "id": "8ef0926d35f5eeda",
    "type": "function",
    "z": "b987205464e9af0a",
    "name": "function 35",
    "func": "//var value1 = undefined;\nvar value1 = null;\nvar value2;\nmsg.payload =
(value1 === value2);\nconsole.log(value1 === value2);\nreturn msg;",
    "outputs": 1,
    "noerr": 0,
    "initialize": "",
    "finalize": "",
    "libs": [],
    "x": 370,
    "y": 420,
    "wires": [
      [
        "f44a4be3b04712fa"
      ]
    ]
  },
  {
    "id": "fbd9848168cde5b2",
    "type": "inject",
    "z": "b987205464e9af0a",
    "name": "",
    "props": [
      {
        "p": "payload"
      },
      {
        "p": "topic",
        "vt": "str"
      }
    ]
  },
  ],
  "repeat": "",
  "crontab": "",
  "once": false,
  "onceDelay": 0.1,
  "topic": "",
  "payload": "",
  "payloadType": "date",
  "x": 160,
  "y": 420,
  "wires": [

```

```

        [
            "8ef0926d35f5eeda"
        ]
    ],
    {
        "id": "f44a4be3b04712fa",
        "type": "debug",
        "z": "b987205464e9af0a",
        "name": "debug 21",
        "active": true,
        "tosidebar": true,
        "console": false,
        "tostatus": false,
        "complete": "false",
        "statusVal": "",
        "statusType": "auto",
        "x": 320,
        "y": 480,
        "wires": []
    },
    {
        "id": "a3384be133c0ec9e",
        "type": "inject",
        "z": "b987205464e9af0a",
        "name": "",
        "props": [
            {
                "p": "payload"
            },
            {
                "p": "topic",
                "vt": "str"
            }
        ],
        "repeat": "",
        "crontab": "",
        "once": false,
        "onceDelay": 0.1,
        "topic": "",
        "payload": "",
        "payloadType": "date",
        "x": 140,
        "y": 560,
        "wires": [
            [
                "4c49694436c36444"
            ]
        ]
    }
]

```



```

    ]
  ]
},
{
  "id": "4c49694436c36444",
  "type": "function",
  "z": "b987205464e9af0a",
  "name": "function 36",
  "func": "var str = true;\nmsg.payload = typeof str;\nreturn msg;",
  "outputs": 1,
  "noerr": 0,
  "initialize": "",
  "finalize": "",
  "libs": [],
  "x": 310,
  "y": 560,
  "wires": [
    [
      "91dccdbf4678d34b"
    ]
  ]
},
{
  "id": "91dccdbf4678d34b",
  "type": "debug",
  "z": "b987205464e9af0a",
  "name": "debug 22",
  "active": true,
  "tosidebar": true,
  "console": false,
  "tostatus": false,
  "complete": "false",
  "statusVal": "",
  "statusType": "auto",
  "x": 340,
  "y": 640,
  "wires": []
},
{
  "id": "8d650bf798942976",
  "type": "inject",
  "z": "b987205464e9af0a",
  "name": "",
  "props": [
    {
      "p": "payload"
    }
  ],

```

```

    {
      "p": "topic",
      "vt": "str"
    }
  ],
  "repeat": "",
  "crontab": "",
  "once": false,
  "onceDelay": 0.1,
  "topic": "",
  "payload": "",
  "payloadType": "date",
  "x": 140,
  "y": 720,
  "wires": [
    [
      "59b5443497351d8e"
    ]
  ]
},
{
  "id": "59b5443497351d8e",
  "type": "function",
  "z": "b987205464e9af0a",
  "name": "function 37",
  "func": "var str = '34.456';\nmsg.payload = Number(str);\nreturn msg;",
  "outputs": 1,
  "noerr": 0,
  "initialize": "",
  "finalize": "",
  "libs": [],
  "x": 310,
  "y": 720,
  "wires": [
    [
      "ee957850a3e5d5e1"
    ]
  ]
},
{
  "id": "ee957850a3e5d5e1",
  "type": "debug",
  "z": "b987205464e9af0a",
  "name": "debug 23",
  "active": true,
  "tosidebar": true,
  "console": false,

```

```
"tostatus": false,
"complete": "false",
"statusVal": "",
"statusType": "auto",
"x": 340,
"y": 800,
"wires": []
},
{
  "id": "8bafaaf655fb68f0",
  "type": "inject",
  "z": "b987205464e9af0a",
  "name": "",
  "props": [
    {
      "p": "payload"
    },
    {
      "p": "topic",
      "vt": "str"
    }
  ],
  "repeat": "",
  "crontab": "",
  "once": false,
  "onceDelay": 0.1,
  "topic": "",
  "payload": "",
  "payloadType": "date",
  "x": 120,
  "y": 880,
  "wires": [
    [
      "f63d7de9314ee0b4"
    ]
  ]
},
{
  "id": "f63d7de9314ee0b4",
  "type": "function",
  "z": "b987205464e9af0a",
  "name": "function 38",
  "func": "var num1 = 21;\nvar num2 = 2;\nmsg.payload = num1 % num2;\nreturn msg;",
  "outputs": 1,
  "noerr": 0,
  "initialize": "",
  "finalize": "",
```

```
"libs": [],
"x": 290,
"y": 880,
"wires": [
  [
    "a26a4487500a8707"
  ]
],
},
{
  "id": "a26a4487500a8707",
  "type": "debug",
  "z": "b987205464e9af0a",
  "name": "debug 24",
  "active": true,
  "tosidebar": true,
  "console": false,
  "tostatus": false,
  "complete": "false",
  "statusVal": "",
  "statusType": "auto",
  "x": 340,
  "y": 940,
  "wires": []
},
{
  "id": "917aef5751c6cdd9",
  "type": "inject",
  "z": "b987205464e9af0a",
  "name": "",
  "props": [
    {
      "p": "payload"
    },
    {
      "p": "topic",
      "vt": "str"
    }
  ],
  "repeat": "",
  "crontab": "",
  "once": false,
  "onceDelay": 0.1,
  "topic": "",
  "payload": "",
  "payloadType": "date",
  "x": 120,
```

```

    "y": 1000,
    "wires": [
      [
        "5d592db053d6cd2c"
      ]
    ]
  },
  {
    "id": "5d592db053d6cd2c",
    "type": "function",
    "z": "b987205464e9af0a",
    "name": "function 39",
    "func": "var num = 5;\nnum--;\nmsg.payload = num;\nreturn msg;",
    "outputs": 1,
    "noerr": 0,
    "initialize": "",
    "finalize": "",
    "libs": [],
    "x": 310,
    "y": 1000,
    "wires": [
      [
        "2e37f2a4d8b971be"
      ]
    ]
  },
  {
    "id": "2e37f2a4d8b971be",
    "type": "debug",
    "z": "b987205464e9af0a",
    "name": "debug 25",
    "active": true,
    "tosidebar": true,
    "console": false,
    "tostatus": false,
    "complete": "false",
    "statusVal": "",
    "statusType": "auto",
    "x": 340,
    "y": 1080,
    "wires": []
  },
  {
    "id": "d266ca1819a86101",
    "type": "function",
    "z": "b987205464e9af0a",
    "name": "function 40",

```

```

    "func": "var celcius = msg.payload;\nvar fahrenheit = (celcius * 9/5) + 32;\nmsg.payload
= 'The temperature ' + celcius + '°C is equivalent to ' + fahrenheit + '°F!';\nmsg.payload =
`The temperature ${celcius}°C is equivalent to
${fahrenheit}°F!`; \nconsole.log(msg.payload);\nreturn msg;",
    "outputs": 1,
    "noerr": 0,
    "initialize": "",
    "finalize": "",
    "libs": [],
    "x": 310,
    "y": 1200,
    "wires": [
        [
            "0a93a5df9861e015"
        ]
    ]
},
{
    "id": "258b2370af29e582",
    "type": "inject",
    "z": "b987205464e9af0a",
    "name": "",
    "props": [
        {
            "p": "payload"
        },
        {
            "p": "topic",
            "vt": "str"
        }
    ],
    "repeat": "",
    "crontab": "",
    "once": false,
    "onceDelay": 0.1,
    "topic": "",
    "payload": "35",
    "payloadType": "num",
    "x": 150,
    "y": 1200,
    "wires": [
        [
            "d266ca1819a86101"
        ]
    ]
},
{

```

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"id": "0a93a5df9861e015",
"type": "debug",
"z": "b987205464e9af0a",
"name": "debug 26",
"active": true,
"tosidebar": true,
"console": false,
"tostatus": false,
"complete": "false",
"statusVal": "",
"statusType": "auto",
"x": 440,
"y": 1260,
"wires": []
}
]
```