Lab Exercise 02 – Duplicate Output

Create the following program and download it into the PLC.

Ladder View

```
       X0                                                    Y0
  1   --| |--------------------------------------------(  OUT  )

       X1                                                    Y0
  2   --| |--------------------------------------------(  OUT  )


  3   ------------------------------------------------(  END  )
```
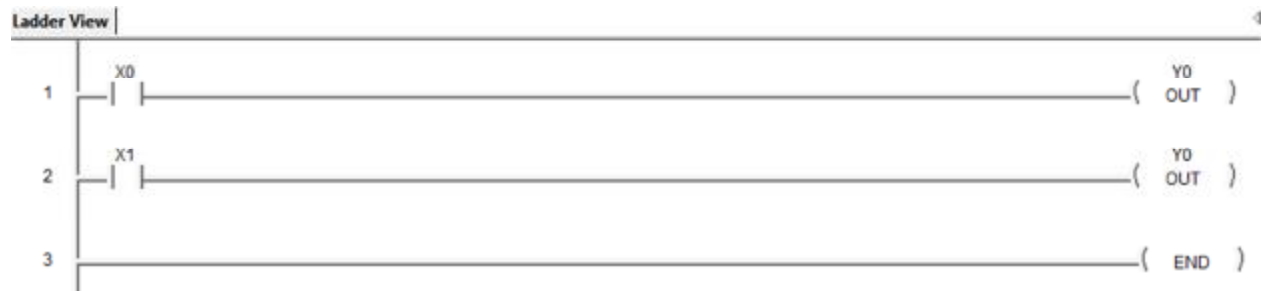
Put the PLC into the Run mode.

Turn on the Status mode and answer the following questions.

1) Press Push Button (PB) X0 and observe the Input Status light on the PLC.
   What happens to it?

2) Does Output Y0 turn on when you press PB X0?

3) What happens when you press PB X1?

4) How come PB X0 doesn't turn on Output Y0?

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In PLCs – Each unique output should only be programmed once – otherwise the last rung to control the output wins.   Use parallel rungs if you have multiple conditions that need to control the output.

```
       X0                                                          Y0
1    ─┤ ├─┬──────────────────────────────────────────────────( OUT )
       X1 │
     ─┤ ├─┘
```