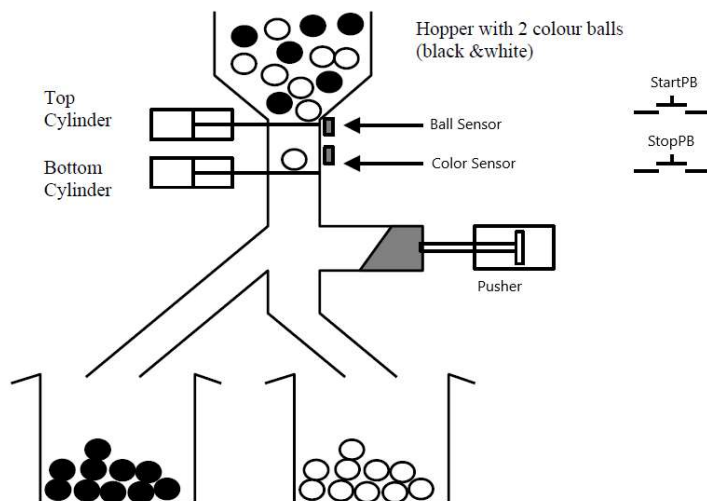


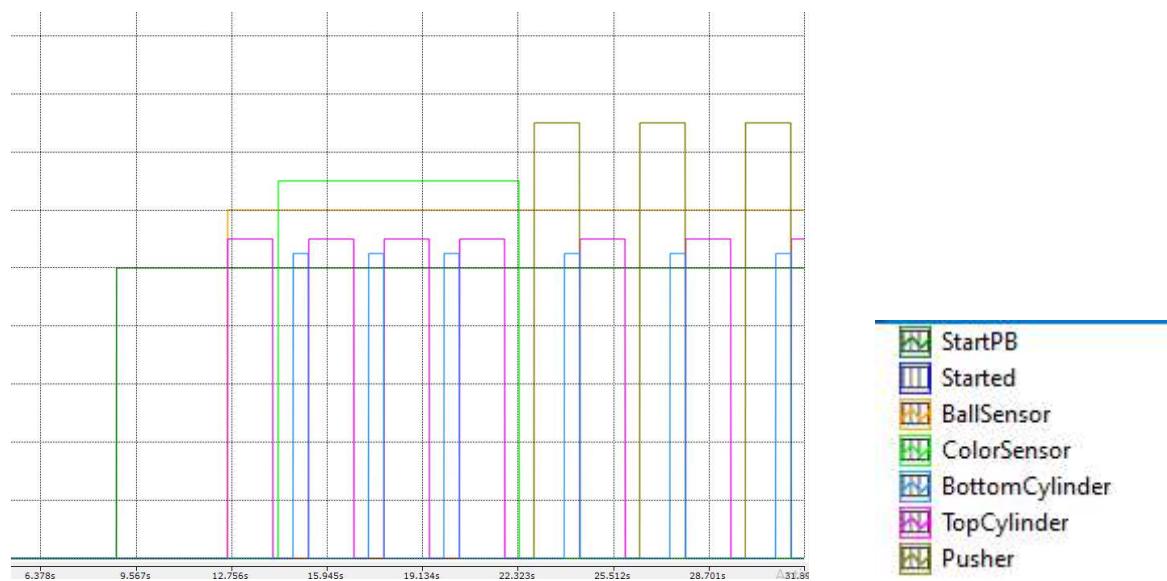
Ball Sorter Mechanism



The system should sort out the black and white balls into two different containers

The start button will start the operation. Ball Sensor will sense the presence of the ball in the hopper. The top solenoid will release the ball for the colour sensor to differentiate the colour before being release into the container.

Time diagramm:



```

1 PROGRAM MAIN
2 VAR
3     // buttons
4     StartPB      : BOOL;
5     StopPB       : BOOL;
6
7     // sensors
8     BallSensor   : BOOL;
9     ColorSensor  : BOOL;
10    Pusher       : BOOL;
11
12    // HW outputs
13    TopCylinder   : BOOL;
14    BottomCylinder : BOOL;
15
16    // Aux. objects
17    Started: BOOL;
18    DelayOn: BOOL;
19    tonDelayTopCyl: TON;
20    tonWhiteBall: TON;
21    tonBlackBall: TON;
22    tonDelay500ms: TON;
23    tonPusher: TON;
24 END_VAR

```

