Solution 2 -

1. Source Code - [d387]

2. Strategy -

```
check if column is detected
    if column detected
        if already on a column
            if traffic not detected and traffic was previously detected
                log "OFF while ON - Same column"
                handle traffic OFF
        else  // new column detected
            if detected too soon since last column
                halt movement
                set error mode
                log "Too frequent column detection"
            else
                log "New column"
                if traffic detected
                    log "Traffic detected"
                    handle traffic ON
                else
                    handle traffic OFF
    else  // no column detected
        if was onColumn
            log "Column finished"
        else
            log "Correction"
            Handle Correction Logic
```

Test Report -

1. TC1 - Let the bot run through the segment with all TI-ON. The bot must stop exactly at the same point with an error range of +/- 1 column (4 cm). - Failed **(STILL UNRESOLVED)**
    a. RCA - Frame count for CI is significantly deviated from frame count of TI so it can happen that for CI - ON for the first time, it reads TI - OFF and executes TI - OFF routine. - Refer here

2. TC2 - During the TC1 process, when the bot stops, turn OFF the WTM. The bot must start moving at a very low speed. Then turn ON again, the bot must stop at the very next column it detects. - Passed **(RESOLVED)**

3. TC3 - During TC1 process, turn OFF the TI after 30 seconds. The bot must start moving with the setSpeed meant for the given region. - Passed **(RESOLVED)**