Procedure for converting LM393 encoder signals to RPM

- Setting up nodeMCU.
- Defining variables.
- Initializing the start time and setting up the end time to let's say t1 seconds more than the start time.
  where, t1 should be an estimate of how long the impeller rotates.
- Detecting the number of transformations from a hole to solid surface, which are detected as '0' or '1' and counting them.
- Calculating the number of rotations by dividing the number of transformations by the number of holes in the slotted disk, which gives us the number of rotations in t1 seconds.
- Dividing it by t1 to obtain the number of rotations in one second.
- Obtaining the rpm by multiplying it to 60.

Pseudo Code

```
// Define variables
      initial_time;
      final_time;
      count;
      sensor;// initializing a variable for sensor
      RPM;

// Set-up procedure
      {
       ------------------
      }

// Main Procedure
      initial_time → millis();          // library func. returning the time of
                                                        program run in milliseconds

      final_time → start_time + t1;

      while (millis()) <  final_time) do{          //while current time is less than end
                                                                          time
            if (digitalRead(sensor)) then  // if a switch to 1 is detected count
                                               increments
          count → count + 1
        end
      end
      rotations_sec → count/(16*t1);        // rotations in 1 second
      RPM ---> (rotations*60);

      // How to show output
      end procedure
```