```
threshold = 5%

for sensor_index in num_sensors:
        background[sensor_index] = read_sensor[sensor_index]

While True
        for sensor_index in num_sensors:
                current_reading[sensor_index] = read_sensor[sensor_index]

                //2 bytes per color channel = 2^8 = 65536
                percent_change[sensor_index] = abs(background[sensor_index] -
current_reading[sensor_index]) / 65536 * 100
                if percent_change[sensor_index] > threshold
                        occupied[sensor_index] = True
                else
                        occupied[sensor_index] = False

        output_occupancy_matrix(occupied)
```