

ACM SMP

Gaming with 1's and 0's

Task -1

Question 1:

The Professor of the college asked students to design a device to curb coping in online exams. It was told that the device will take three inputs, one from the computer to check for changing tabs, second from the inbuilt sound sensor and third from the camera of the laptop.

if the device detects no issue i.e if no tabs is changed, there is no suspicious sound, and camera detects everything as normal then the device shows green light.

If there is detection of any one issue from the three inputs the it will show yellow light if there are two or more issues then automatically it will stop the test.

Design a circuit for above using appropriate gates and draw the truth table.
All the inputs are one-bit inputs.