

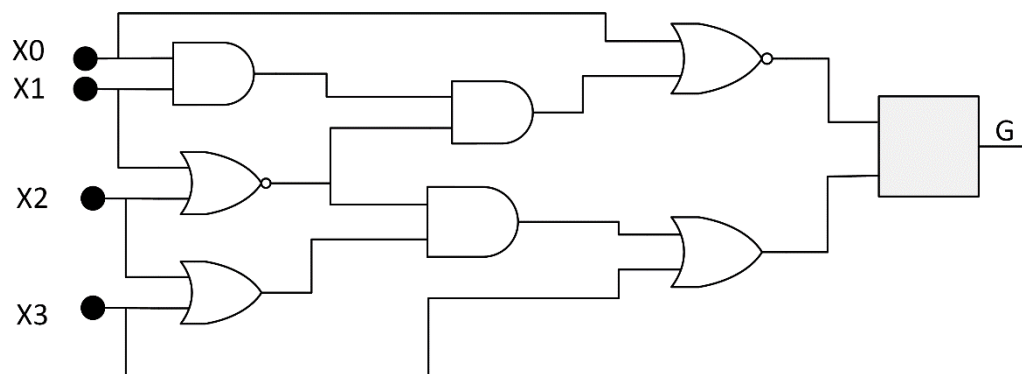
Instead of square box shown in Fig. 1;

- use OR gate if last digit of your school number is one of 0, 1, 2 or 3
- use AND gate if last digit of your school number is one of 4, 5 or 6,
- use NOR gate if last digit of your school number is one of 7, 8 or 9.

1. Find the Boolean function for the output G shown in Fig. 1.
2. Write the sum of product (SOP) representation of the the Boolean function for the output G.
3. Fill in Table 1

**Table 1**

| $X_3X_2X_1X_0$ | G |
|----------------|---|
| 1101           |   |
| 1011           |   |
| 0111           |   |



**Figure 1**