LED TASK V0

Name : Youssef Ahmed Abbas Mohamed

1. ***Hardware Requirements***
   1. *Four LEDs (LED0, LED1, LED2, LED3)*
   2. One button (BUTTON0)
2. ***Software Requirements***
   1. Initially, all LEDs are OFF
   2. Once BUTTON0 is pressed, LED0 will be ON
   3. Each press further will make another LED is ON
   4. At the fifth press, LED0 will changed to be OFF
   5. Each press further will make only one LED is OFF
   6. This will be repeated forever
   7. The sequence is described below
      1. Initially (OFF, OFF, OFF, OFF)
      2. Press 1 (ON, OFF, OFF, OFF)
      3. Press 2 (ON, ON, OFF, OFF)
      4. Press 3 (ON, ON, ON, OFF)
      5. Press 4 (ON, ON, ON, ON)
      6. Press 5 (OFF, ON, ON, ON)
      7. Press 6 (OFF, OFF, ON, ON)
      8. Press 7 (OFF, OFF, OFF, ON)
      9. Press 8 (OFF, OFF, OFF, OFF)
      10. Press 9 (ON, OFF, OFF, OFF)

Diagram

Description automatically generated