

Time in Program	buttonPin	buttonState	lastButtonState	ledState
Beginning before loop()	LOW	LOW set by initial assignment	LOW set by initial assignment	LOW set by initial assignment
	FIRST LOOP (button NOT pressed)			
Top of loop() button not pressed yet	LOW	LOW set by digitalRead()	LOW	LOW
Check condition of if statement	DO NOT enter if statement			
Last statement before going through loop() again	LOW	LOW	LOW set by lastButtonState = buttonState	LOW
	PRESS BUTTON LOOP - Still holding button pressed!			
Top of loop() still holding button	HIGH	HIGH set by digitalRead()	LOW	LOW
Check condition of if statement	Do NOT enter if statement since buttonState = HIGH Must wait till buttonState is read as LOW			
Last statement before going through loop() again	HIGH	HIGH	HIGH set by lastButtonState = buttonState	LOW
	LOOP AFTER PRESS BUTTON LOOP (button is NOT pressed) - NOW turn LED on			
Top of loop() button released	LOW	LOW set by digitalRead()	HIGH	LOW
Check condition of if statement	Enter first if statement since buttonState = LOW AND lastButtonState = HIGH. Switch the ledState			
Switch ledState	LOW	LOW	HIGH	HIGH
Last statement before going through loop() again	LOW	LOW	LOW set by lastButtonState = buttonState	HIGH
	PRESS BUTTON LOOP - Still holding button pressed!			
Top of loop() still holding button	HIGH	HIGH set by digitalRead()	LOW	HIGH
Check condition of if statement	Do NOT enter if statement since buttonState = HIGH Must wait till buttonState is read as LOW			
Last statement before going through loop() again	HIGH	HIGH	HIGH set by lastButtonState = buttonState	HIGH
	LOOP AFTER PRESS BUTTON LOOP (button is NOT pressed) - NOW turn LED off			
Top of loop() button released	LOW	LOW set by digitalRead()	HIGH	HIGH
Check condition of if statement	Enter first if statement since buttonState = LOW AND lastButtonState = HIGH Switch the ledState			
Switch ledState	LOW	LOW	HIGH	LOW
Last statement before going through loop() again	LOW	LOW	LOW set by lastButtonState = buttonState	LOW