Flag Incremented

If button pressed

Flag=0

GPIO

Initialization

SystemClock Initialization

HAL

Initialization

Ini

Include all necessary files

Flag==1

RED LED OFF

Blink leds at 8Hz

Blink leds at 4Hz

Blink leds at 1Hz

RED LED ON

Yes

While

(1)

Yes

If Interrupt

Yes

No

If flag==5

If flag==4

If flag==3

If flag==2

If flag==1

No No No No No

Yes Yes

Yes Yes Yes