```c
#include "pwm.h"

void PWM_Clock(void)
{
  RCC->APB2ENR |= RCC_APB2ENR_TIM1EN | RCC_APB2ENR_TIM15EN | RCC_APB2ENR_IOPAEN |  RCC_APB2ENR_IOPBEN | RCC_APB2ENR_AFIOEN;
  GPIOA->CRH |= GPIO_CRH_CNF8_1 | GPIO_CRH_MODE8;
  GPIOA->CRH &= ~GPIO_CRH_CNF8_0 ;
  GPIOA->CRH |= GPIO_CRH_CNF9_1 | GPIO_CRH_MODE9;
  GPIOA->CRH &= ~GPIO_CRH_CNF9_0 ;
}
void PWM_Init(void)
{
  TIM1->CR1 |= TIM_CR1_CEN;
  TIM1->CR2 |= TIM_CR2_OIS1 | TIM_CR2_OIS2;
  TIM1->EGR |= TIM_EGR_UG;
  TIM1->CCMR1 |= TIM_CCMR1_OC1M_2 | TIM_CCMR1_OC1M_1 | TIM_CCMR1_OC1PE | TIM_CCMR1_OC1FE;
  TIM1->CCMR1 |= TIM_CCMR1_OC2M_2 | TIM_CCMR1_OC2M_1 | TIM_CCMR1_OC2PE | TIM_CCMR1_OC2FE;
  TIM1->CCER |= TIM_CCER_CC1E | TIM_CCER_CC2E ;
  TIM1->PSC = 0x450;
  TIM1->ARR = 0x64;
  TIM1->CCR1 = 0x0;
  TIM1->CCR2 = 0x0;
  TIM1->BDTR |= TIM_BDTR_MOE | TIM_BDTR_OSSI;
  TIM1->CR1 |= TIM_CR1_ARPE | TIM_CR1_CEN;



}
void PWM_state0(void)
{
    TIM1->PSC = 0x1000;
    TIM1->CCR1 = 0x0;
    TIM1->CCR2 = 0x0;
    TIM1->EGR = TIM_EGR_UG;
}
void PWM_state1(void)
{
    TIM1->PSC = 0x190;
    TIM1->CCR2 = 0x32;
    TIM1->EGR = TIM_EGR_UG;
}
void PWM_state2(void)
{
    TIM1->PSC = 0x800;
    TIM1->CCR1 = 0x32;
    TIM1->CCR2 = 0x32;
    TIM1->EGR = TIM_EGR_UG;
}

```