QUIZ 2

1. If the number of button presses is divided by 3, turn on the LEDs which are connected to the PD12 & PD13 pins. If the number of button presses is divided by 5, turn on the LEDs which are connected to the PD14 & PD15 pins. Otherwise, turn on the all LEDs which are connected to the PD12, PD13, PD14, and PD15 at the same time. Use ODR to assign bit values to the related pins. You must use IDR to read the button value. Use HAL_Delay function to prevent debouncing.

```
if(GPIOA->IDR&0x0001) //Check if the button is pushed using IDR
{
  i=i+1; // Increase the value of i by one each time a button is pushed.
 HAL_Delay(200);
}

if(i%3==0) //Check for divided by 3
{
 GPIOD->ODR=0x3000; //Assign logic 1 to the PD12 & PD13 at the D port

 HAL_Delay(200); //Wait 0.2 second
}
else if (i%5==0)
{
  GPIOD->ODR=0xC000; //Assign logic 1 to the PD14 & PD15 pins
  HAL_Delay(200); //Wait 0.2 second
}
else
{
    GPIOD->ODR=0xF000; //Assign logic 1 to the PD12, PD13, PD14 & PD15 pins

    HAL_Delay(200); //Wait 0.2 second
}
```

2. If the number of button presses is less than 5 or equal to 5, turn on the LEDs which are connected to the PD13 & PD14 pins. If the number of button presses is greater than 5 and even number, turn on the LEDs which are connected to the PD12 & PD15 pins. Otherwise, turn on the all LEDs which are connected to the PD12, PD13, PD14, and PD15 at the same time. Use ODR to assign bit values to the related pins. You must use IDR to read the button value. Use HAL_Delay function to prevent debouncing.

```
if(GPIOA->IDR&0x0001) //Check if the button is pushed using IDR
{
    i=i+1; // Increase the value of i by one each time a button is pushed.

     HAL_Delay(200);

}

if(i<=5)
 {

   GPIOD->ODR=0x6000; //Assign logic 1 to the PD13 & PD14 at the D port

    HAL_Delay(200); //Wait 0.2 second

}

else if (i>5&&i%2==0)


{

    GPIOD->ODR=0x9000; //Assign logic 1 to the PD12 & PD15 pins at the D port

    HAL_Delay(200); //Wait 0.2 second

}
else

    {

        GPIOD->ODR=0xF000; //Assign logic 1 to the PD12, PD13, PD14 & PD15 pins

        HAL_Delay(200); //Wait 0.2 second

    }
```