Assignment 2: Blink 3 LEDs - Using Delays

Using delays only make your 3 LEDs flash at differing rates.

Assignment instructions

In this assignment you will be required to edit the 'Blink 3 LEDs - Using Delay' lecture code to make the LEDs flash at differing rates.

Questions for this assignment

1. Make the LEDs toggle between on and off, using only delays, at the following rates. All LEDs must be in the ON state at the start:

   LED 1 - Once per 500ms

   LED 2 - Once per 1000ms

   LED 3 - Once per 1500ms

Assignment solution

1. Make the LEDs toggle between on and off, using only delays, at the following rates. All LEDs must be in the ON state at the start:

   LED 1 - Once per 500ms

   LED 2 - Once per 1000ms

   LED 3 - Once per 1500ms

```
void loop()
{
    // 0 seconds
    digitalWrite(LED1, HIGH);
    digitalWrite(LED2, HIGH);
    digitalWrite(LED3, HIGH);
    delay(500);
    // 0.5 seconds
    digitalWrite(LED1, LOW);
    delay(500);
    // 1.0 seconds
    digitalWrite(LED1, HIGH);
```

```
    digitalWrite(LED2, LOW);
    delay(500);
    // 1.5 seconds
    digitalWrite(LED1, LOW);
    digitalWrite(LED3, LOW);
    delay(500);
    // 2.0 seconds
    digitalWrite(LED1, HIGH);
    digitalWrite(LED2, HIGH);
    delay(500);
    // 2.5 seconds
    digitalWrite(LED1, LOW);
    delay(500);
    // 3.0 seconds
    digitalWrite(LED1, HIGH);
    digitalWrite(LED2, LOW);
    digitalWrite(LED3, HIGH);
    delay(500);
    // 3.5 seconds
    digitalWrite(LED1, LOW);
    delay(500);
    // 4.0 seconds
    digitalWrite(LED1, HIGH);
    digitalWrite(LED2, HIGH);
    delay(500);
    // 4.5 seconds
    digitalWrite(LED1, LOW);
    digitalWrite(LED3, LOW);
    delay(500);
    // 5.0 seconds
    digitalWrite(LED1, HIGH);
    digitalWrite(LED2, LOW);
```

```
    delay(500);
    // 5.5 seconds
    digitalWrite(LED1, LOW);
    delay(500);
    // 6.0 seconds
}
```