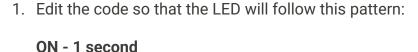
### Assignment 1: Blinky

In this assignment you will take what you have learnt in the Blink 1 LED lecture and tinker with the code to make it do something slightly different.

## **Assignment instructions**

Take the Blink 1 LED code and edit it so that the LED will flash consecutively at different ON/OFF rates. Each question will tell you exactly what rates your LED must flash at.

#### Questions for this assignment



OFF - 1 second

ON - 2 seconds

OFF - 2 seconds

**REPEAT** 

2. Edit the code so that the LED will follow this pattern:

ON - 250ms

OFF - 1 second

**ON - 100ms** 

OFF - 2 seconds

**REPEAT** 

3. Edit the code so that the LED will follow this pattern:

ON - 100ms

**OFF - 100ms** 

ON - 250ms

OFF - 250ms

```
ON - 500ms

OFF - 500ms

ON - 1000ms

OFF - 1000ms

REPEAT
```

# Assignment solutions

1. Edit the code so that the LED will follow this pattern:

```
ON - 1 second
OFF - 1 second
ON - 2 seconds
OFF - 2 seconds
REPEAT
```

```
void loop()
{
    digitalWrite(2, HIGH);
    delay(1000);
    digitalWrite(2, LOW);
    delay(1000);
    digitalWrite(2, HIGH);
    delay(2000);
    digitalWrite(2, LOW);
    delay(2000);
}
```

2. Edit the code so that the LED will follow this pattern:

```
ON - 250ms

OFF - 1 second

ON - 100ms

OFF - 2 seconds
```

#### **REPEAT**

```
void loop()
{
    digitalWrite(2, HIGH);
    delay(250);
    digitalWrite(2, LOW);
    delay(1000);
    digitalWrite(2, HIGH);
    delay(100);
    digitalWrite(2, LOW);
    delay(2000);
}
```

3. Edit the code so that the LED will follow this pattern:

```
ON - 100ms

OFF - 100ms

ON - 250ms

OFF - 250ms

ON - 500ms

OFF - 500ms

ON - 1000ms

OFF - 1000ms
```

**REPEAT** 

```
void loop()
{
   digitalWrite(2, HIGH);
   delay(100);
   digitalWrite(2, LOW);
   delay(100);
   digitalWrite(2, HIGH);
   delay(250);
   digitalWrite(2, LOW);
   delay(250);
   digitalWrite(2, HIGH);
   delay(500);
   digitalWrite(2, LOW);
   delay(500);
   digitalWrite(2, HIGH);
   delay(1000);
   digitalWrite(2, LOW);
   delay(1000);
}
```