

Task:- LED blinking with Arduino

**program an arduino board an led at a specific interval.this
project introduction basis embedded programming concepts and
interfacing with hardware**

```
// Define pin for LED
int ledPin = 9; // LED connected to digital pin 9

// Time intervals for LED blink in milliseconds
int onTime = 500; // LED ON for 500 milliseconds
int offTime = 1000; // LED OFF for 1000 milliseconds

void setup() {
  // Initialize the LED pin as an output
  pinMode(ledPin, OUTPUT);
}

void loop() {
  // Turn the LED ON
  digitalWrite(ledPin, HIGH);
  delay(onTime); // Wait for the ON time

  // Turn the LED OFF
  digitalWrite(ledPin, LOW);
  delay(offTime); // Wait for the OFF time
}
```