

/*

Experiment No. : 07

Statement : Blink an LED with two switches. One switch for increasing the blinking rate and other for decreasing the blinking rate.

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Code Snippet

```
int ledPin = 4; // Assuming you have connected the LED to
digital pin 13
```

```
int increaseSwitchPin = 6; // Pin for the switch to
increase blinking rate
```

```
int decreaseSwitchPin = 7; // Pin for the switch to
decrease blinking rate
```

```
int blinkInterval = 1000; // Initial blinking rate in
milliseconds
```

```
void setup() {
```

```
    pinMode(ledPin, OUTPUT);
```

```
    pinMode(increaseSwitchPin, INPUT_PULLUP);
```

```
    pinMode(decreaseSwitchPin, INPUT_PULLUP);
```

```
}
```

```
void loop() {
```

```
    digitalWrite(ledPin, HIGH);
```

```
    delay(blinkInterval);
```

```

digitalWrite(ledPin, LOW);

delay(blinkInterval);


// Check the state of the switches
if (digitalRead(increaseSwitchPin) == LOW) {
    increaseBlinkInterval();
}

if (digitalRead(decreaseSwitchPin) == LOW) {
    decreaseBlinkInterval();
}
}

void increaseBlinkInterval() {
    blinkInterval = 1000;

    delay(200); // Debounce delay to avoid rapid multiple
presses
}

void decreaseBlinkInterval() {
    if (blinkInterval > 100) { // Ensure blinking rate
doesn't go below 100 milliseconds

        blinkInterval =100;

        delay(200); // Debounce delay to avoid rapid multiple
presses
    }
}
}

```





