

## Exercise 5\_Serial monitor (read/write)

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```

1  int incomingByte = 0;
2
3  void setup() {
4      Serial.begin(9600);
5  }
6
7  void loop() {
8      if (Serial.available() > 0) {
9          incomingByte = Serial.read();
10         Serial.print("I received: ");
11         Serial.println(incomingByte, DEC);
12     }
13 }

```

Output    Serial Monitor    x

Message (Enter to send message to 'Arduino Uno' on 'COM3')

```

I received: 71
I received: 10

```

## Questions

- 5a: Why are you not receiving what you wrote? (e.g. G becomes 71)

Because the returned value is in ascii code, and 71 is the ascii code for the character G

- 5b: What happens if the serial monitor sends a line ending?

A line ending is given by 10 in ascii code

- 5c: Try changing the line `Serial.print(incomingByte, DEC)` to `Serial.print((char)incomingByte)`. What happens? Why?

The serial monitor now receives the character instead of the ascii code, so if you send G, you get G back, and then a blank space because 10 in ascii code is not a character but a line feed.

```

I received: G
I received:

```