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[Wire \(//www.arduino.cc/en/Reference/Wire\)](#)

write()

Description

Writes data from a slave device in response to a request from a master, or queues bytes for transmission from a master to slave device (in-between calls to `beginTransaction()` and `endTransmission()`).

Syntax

```
Wire.write(value)  
Wire.write(string)  
Wire.write(data, length)
```

Parameters

value: a value to send as a single byte

string: a string to send as a series of bytes

data: an array of data to send as bytes

length: the number of bytes to transmit

Returns

byte: `write()` will return the number of bytes written, though reading that number is optional

Example

```

#include <Wire.h>

byte val = 0;

void setup()
{
  Wire.begin(); // join i2c bus
}

void loop()
{
  Wire.beginTransmission(44); // transmit to device #44 (0x2c)
                                // device address is specified in datasheet
  Wire.write(val);             // sends value byte
  Wire.endTransmission();      // stop transmitting

  val++;                      // increment value
  if(val == 64) // if reached 64th position (max)
  {
    val = 0;                  // start over from lowest value
  }
  delay(500);
}

```

[Get Code] (<http://www.arduino.cc/en/Reference/WireWrite?action=sourceblock&num=1>)

See also

- [WireRead](http://www.arduino.cc/en/Reference/WireRead) (<http://www.arduino.cc/en/Reference/WireRead>())
- [WireBeginTransmission](http://www.arduino.cc/en/Reference/WireBeginTransmission) (<http://www.arduino.cc/en/Reference/WireBeginTransmission>())
- [WireEndTransmission](http://www.arduino.cc/en/Reference/WireEndTransmission) (<http://www.arduino.cc/en/Reference/WireEndTransmission>())
- [Serial.write](http://www.arduino.cc/en/Serial/Write) (<http://www.arduino.cc/en/Serial/Write>())

[Reference Home](http://www.arduino.cc/en/Reference/HomePage) (<http://www.arduino.cc/en/Reference/HomePage>)

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