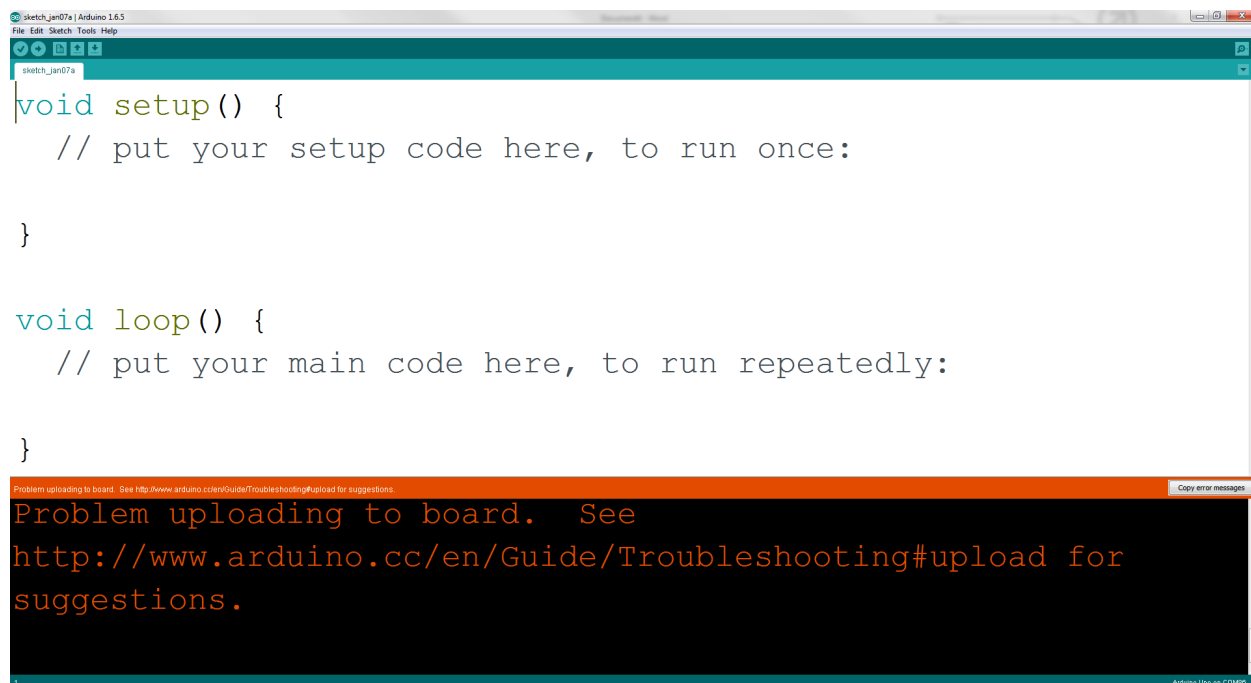


If you've started using Arduino at home, you may have run into some errors, I know I do from time to time. We don't want those errors to keep you from trying more, so I'm going to give you some pointers on typical errors that may come up and how to fix them. When you get an error, the most important thing is to read the error message in orange.

## **Problem Uploading to board**

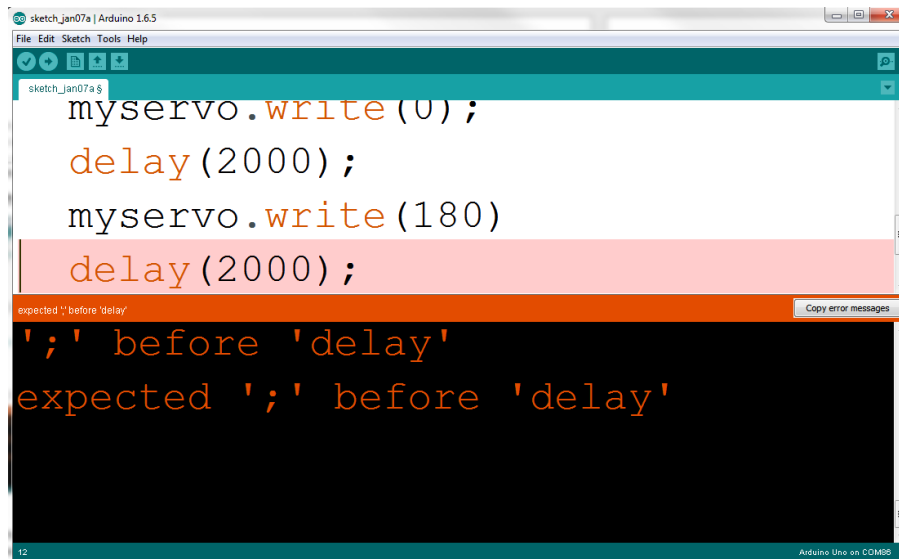


```
void setup() {  
  // put your setup code here, to run once:  
  
}  
  
void loop() {  
  // put your main code here, to run repeatedly:  
  
}
```

Problem uploading to board. See <http://www.arduino.cc/en/Guide/Troubleshooting#upload> for suggestions.

This typically means that you haven't selected the right port or possibly are not connected to the Arduino with your USB cable. First, be sure that the USB cable is completely plugged in to both the Arduino and the computer. Next, check the port by going to Tools, Port, and selecting the Com# that says (Arduino Uno) next to it. If there are 2 that say Arduino Uno, select the larger one. If none say Arduino Uno, you may need to disconnect the USB cable and try another port or restart the Arduino program or even your computer.

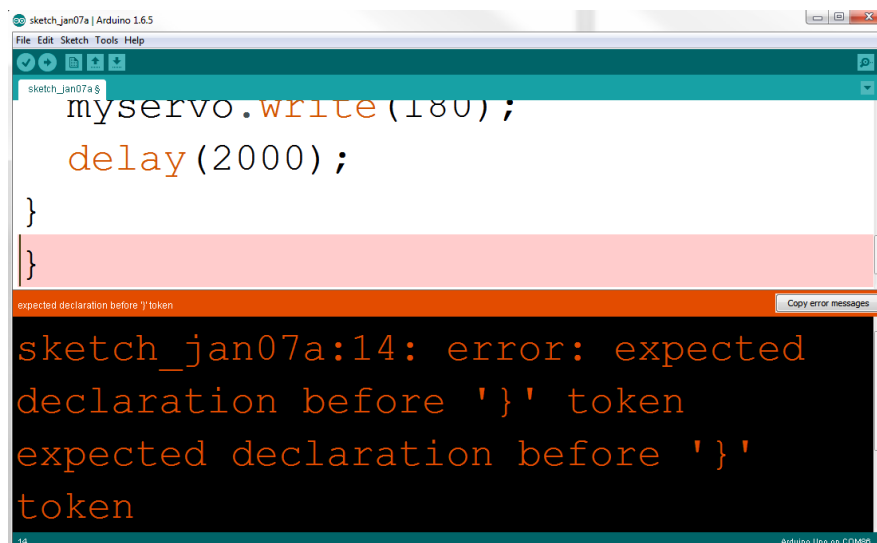
### Expected ';' before 'delay'



```
sketch_jan07a | Arduino 1.6.5
File Edit Sketch Tools Help
sketch_jan07a $
myservo.write(0);
delay(2000);
myservo.write(180);
delay(2000);
expected ';' before 'delay'
';' before 'delay'
expected ';' before 'delay'
```

This means that you missed something. And it even highlights the problem area for you. It highlighted `delay(2000);` but the error message says that it expected a `;` before the `delay`. If you look at the line above it, you'll notice that it does not have a semicolon at the end of the line, and that is why you are getting an error. If you missed semicolons on multiple lines you may get this error message multiple times.

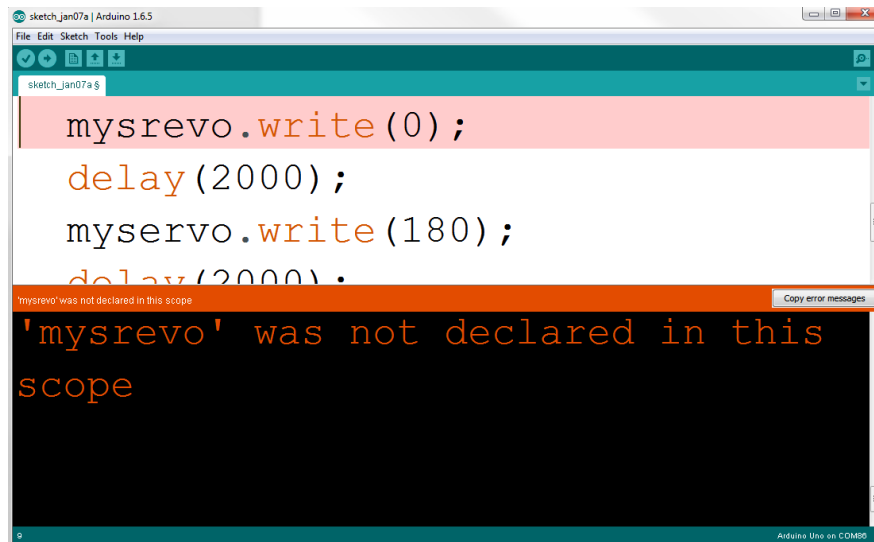
### Expected declaration before '}' token



```
sketch_jan07a | Arduino 1.6.5
File Edit Sketch Tools Help
sketch_jan07a $
myservo.write(180);
delay(2000);
}
}
expected declaration before '}' token
sketch_jan07a:14: error: expected
declaration before '}' token
expected declaration before '}'
token
```

In this case, there are two closed brackets at the end of the code. You can have only one closed bracket at the end of the `setup` and another at the end of your `loop`.

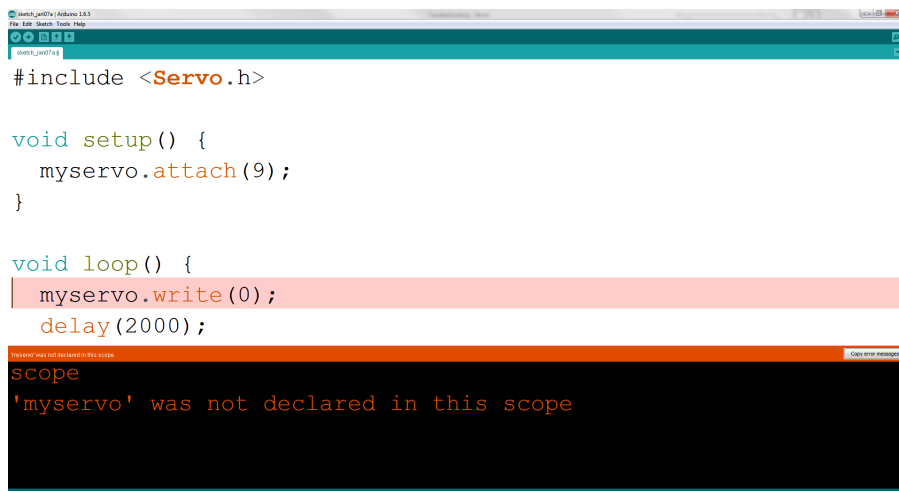
### ' was not declared in this scope



```
sketch_jan07a | Arduino 1.6.5
File Edit Sketch Tools Help
sketch_jan07a.g
mysrevo.write(0);
delay(2000);
myservo.write(180);
delay(2000);
'mysrevo' was not declared in this scope
Copy error messages
Arduino Uno on COM9
```

This tells me that mysrevo was not declared. If you look closely, I spelled myservo wrong. Check your spelling in the highlighted line if you get this error.

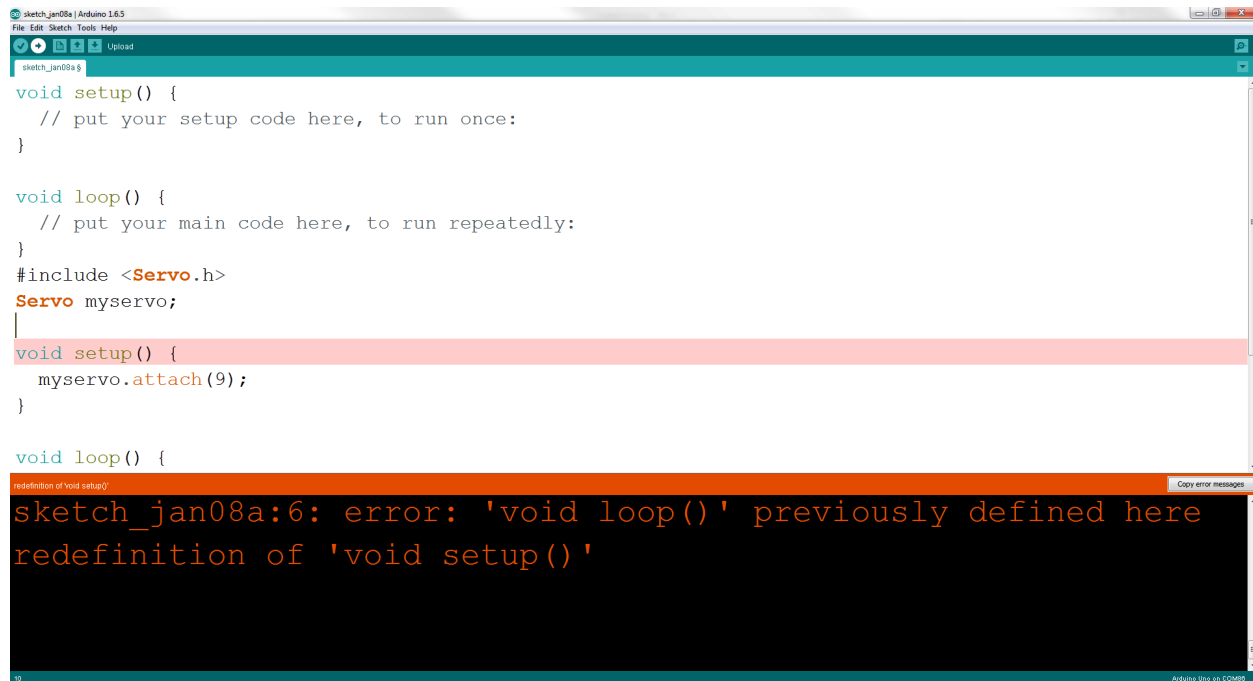
### 'myservo' was not declared in this scope



```
sketch_jan07a | Arduino 1.6.5
File Edit Sketch Tools Help
sketch_jan07a.g
#include <Servo.h>
void setup() {
  myservo.attach(9);
}
void loop() {
  myservo.write(0);
  delay(2000);
}
'myservo' was not declared in this scope
Copy error messages
Arduino Uno on COM9
```

In this case, myservo is spelled correctly, but I am missing an important line of code in the beginning. I told Arduino that I was going to use a servo, but I never gave that servo a name. By including Servo myservo after #include <Servo.h> I have successfully named my servo myservo.

## Redefinition of 'void setup()'

A screenshot of the Arduino IDE interface. The main editor window shows a sketch named 'sketch\_jan08a' with the following code:

```
void setup() {  
  // put your setup code here, to run once:  
}  
  
void loop() {  
  // put your main code here, to run repeatedly:  
}  
#include <Servo.h>  
Servo myservo;  
|  
void setup() {  
  myservo.attach(9);  
}  
  
void loop() {
```

The second 'void setup()' function is highlighted with a red background. Below the editor, the Serial Monitor window is open, displaying an error message in orange text: 'sketch\_jan08a:6: error: 'void loop()' previously defined here' redefinition of 'void setup()'. The IDE title bar indicates 'sketch\_jan08a | Arduino 1.6.5'.

When you first open a new sketch, it provides you with a bare bones example of including a setup and a loop. We typically erase this and start over, but you could leave it and then type your code in the right places. You can only have one void setup and one void loop in your code, so you'll need to delete the first setup and loop.