

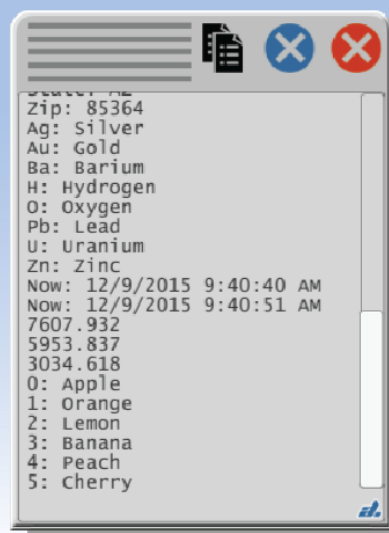


dynamic arts

DABug

Debugging
Message Window
for Unity

Must-have dev tool!
2D/3D/UI/Combo scenes
Active between scenes



Dynamic Arts DABug v4.2
Debugging Message Window for Unity
Documentation

<http://DynamicArts.com>

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DABug Overview

The DABug Debugging Message Window
Is a great visual development tool which displays your
Debugging messages in a draggable window inside your scene
Instead of the Debug.Log console window.

It holds up to 2000 lines of rolling text, which can be copied to the
Clipboard and pasted anywhere.

It's quick and easy!!!

Just drop the prefab anywhere on your project.

Instead of your standard debug message:

Debug.Log(message);

We use:

DABug.Log(message);

OR QUICK-TYPE COMMAND:

a.s(message);

Also includes simple code keywords for:

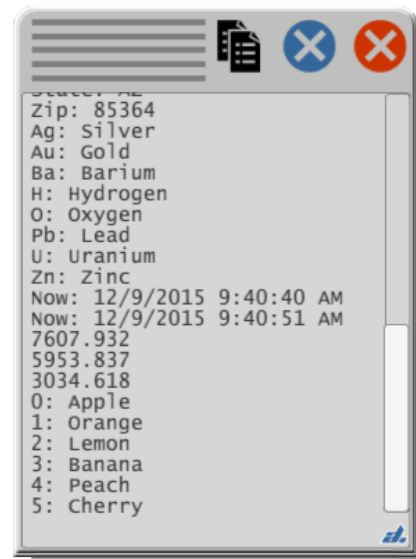
Copying text

Opening/Closing the window

Positioning the window

Clearing the window text

See **Appendix B: Code Samples** at the end of this document.



Note

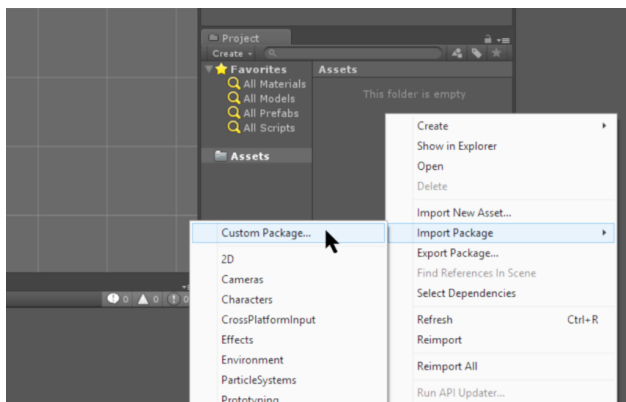
This Unity package was built with Unity 5.5. There are a few new programming changes that will not work in previous versions.



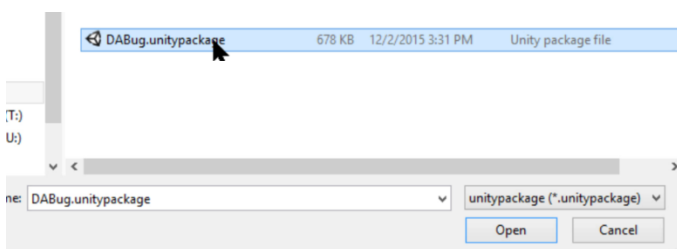
DABug Installation 1-2-3

If you are installing from the Unity Asset Store, continue to Step 3.

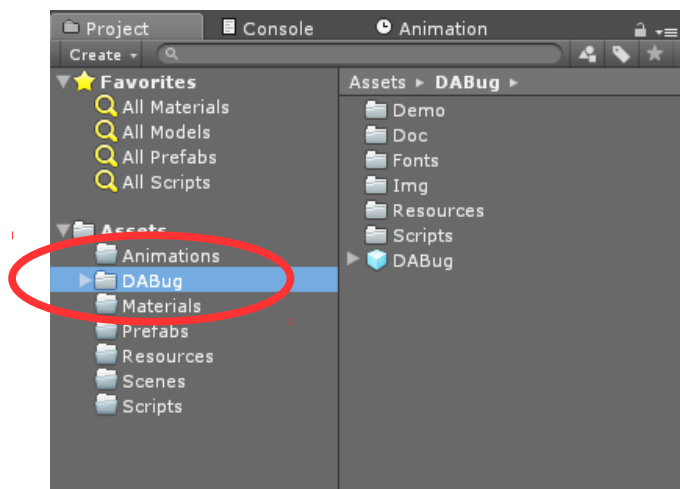
1. Manual installation: Download the DABug Custom Package



2. From the Assets folder, right-click → Import Package → Custom Package



3. Choose the DABug Unity Package from your download directory. Import everything listed in the package.



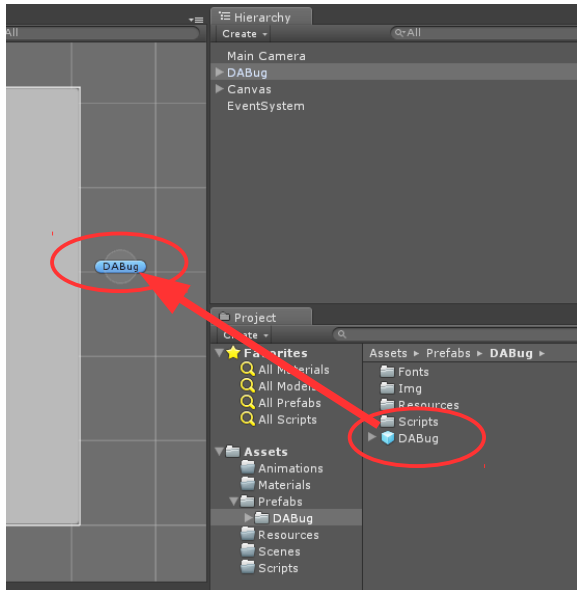
One folder will be created:

DABug: Holds the main DABug window prefab. You may want to move this folder to your **Prefabs** folder.

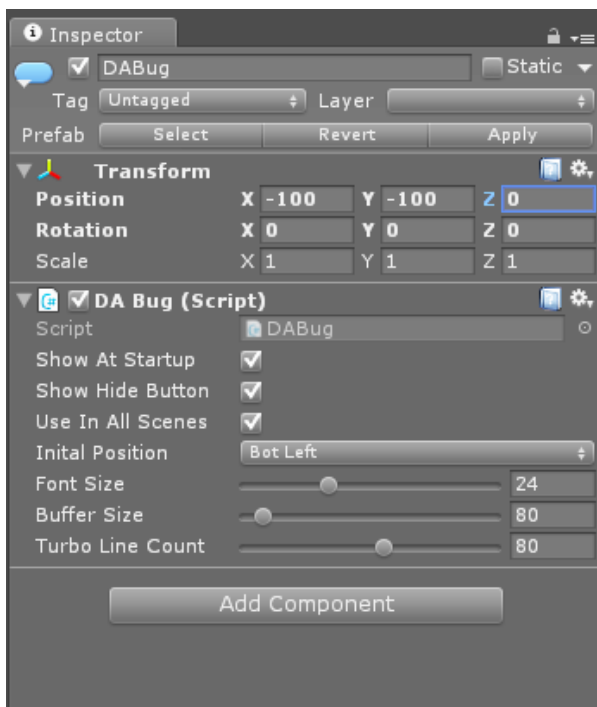
Inside, the **Demo** folder holds the demonstration scenes.

You can delete the **Demo** folder if you don't need the demo scenes.

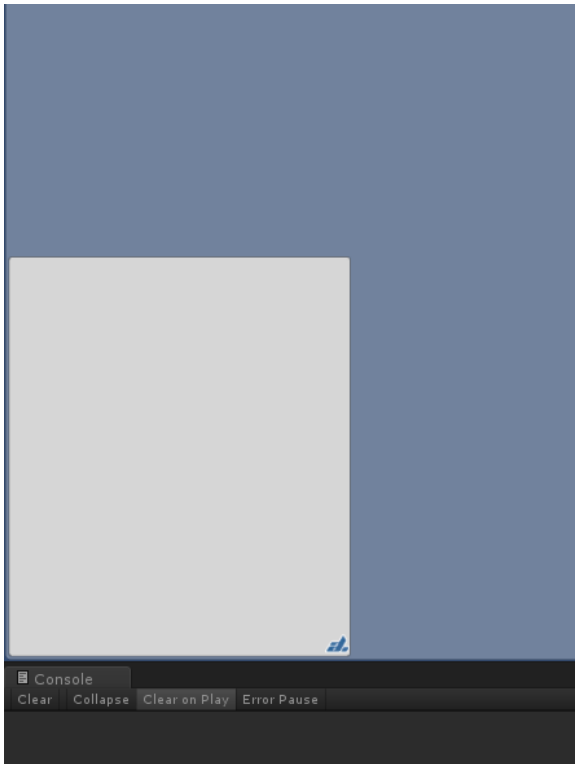




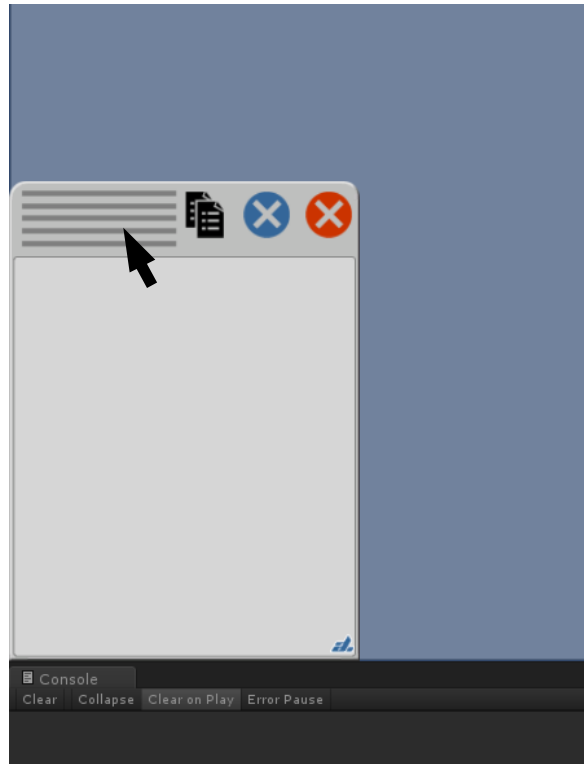
From the DABug folder, simply drag the DABug prefab **anywhere into your scene**. The object will appear as a small icon.



You may adjust the DABug object properties in the Inspector, if desired.
See **Appendix A** for property descriptions.



When the scene is played, the DABug window will appear in the corner.



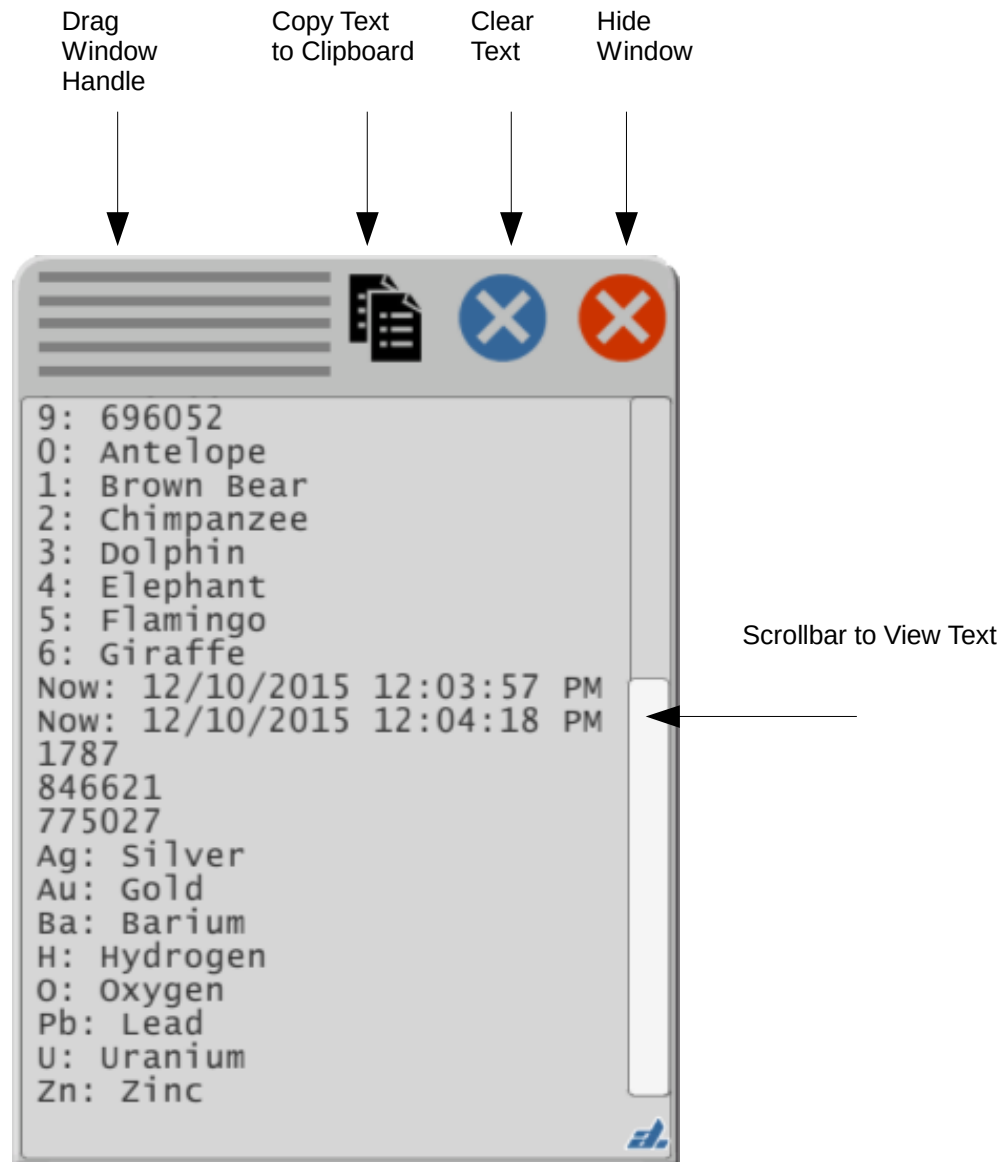
When the mouse rolls over the DABug window, the top expands, revealing controls to: Drag, Copy, Clear and Remove the window.

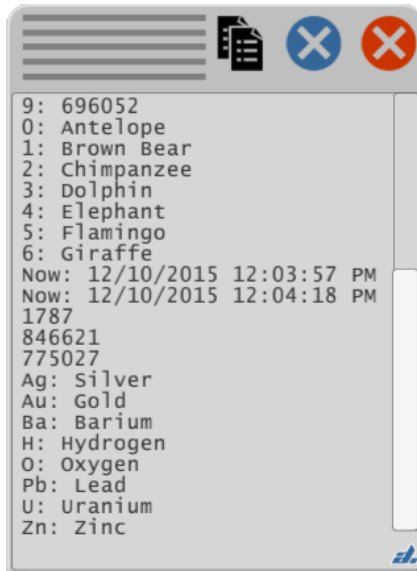
Your debugging messages can appear in the window by using the **DABug.Log()** or **a.s()** command. See **Appendix B: Code Samples** for examples.

If a message line exceeds 100 characters in length, it is split into multiple lines.

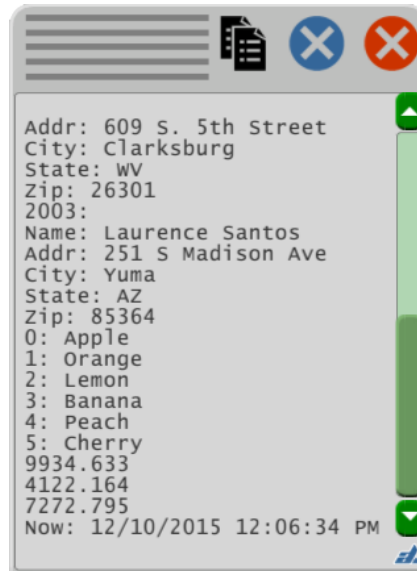


Mouse/Finger Controls During Execution





Normal Mode



Turbo Mode: Scrollbar turns green.

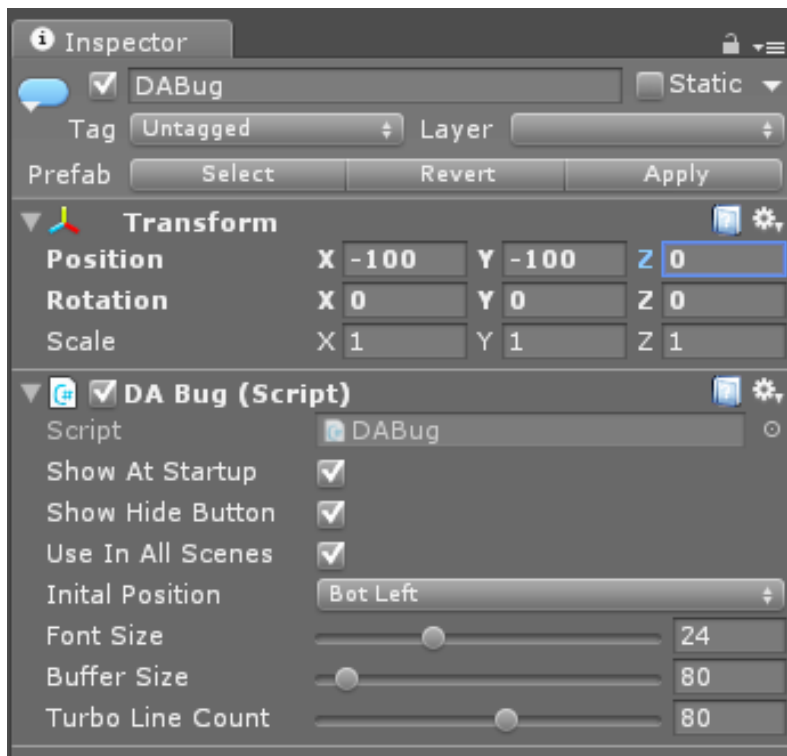
Normal Mode: The window text will scroll normally, line by line.
Turbo Mode: The window text will scroll page by page.

The DABug window will enter Turbo Mode when the Turbo Line Count property is exceeded.
See **Appendix A: DABug Prefab Inspector Properties** for more information.
Turbo Mode changes the text scrolling behavior from line-by-line to page-by-page.

Text paging is employed to reduce the number of vertices needed to draw the object.
This keeps the object extremely lightweight and will not slow down the render time in your project.

Note!

Your other objects/code in your projects may also increase the vertex count.
If you are finding that setting a DABug message causes a vertex error (too many vertexes),
Simply lower the **Turbo Line Count parameter in the inspector**. This will keep the vertex count low.



Show At Startup

The DABug window is active upon project execution.

To show or hide the window, use the `DABug.Log("#show#")` or `DABug.Log("#hide#")` commands.

Show Hide Button

Display the "Hide" button.

Hiding this prevents accidental disabling of the DABug window.



Use in All Scenes

Allow the DABug window to persist in all scenes.

Initial Position

Upon execution, display the DABug window in the selected corner.

The window is always able to be dragged with the mouse or finger.

Font Size

Window text font size

Min: 18, Max: 36, Default: 24

Buffer Size

Total number of text lines hold

Min: 10, Max: 2000, Default: 80

Turbo Line Count

of scrollable lines before window enters Turbo mode.

Min: 30, Max: 120, Default: 80

Appendix B: Code Samples (C#)

Results are colored red



```
// IMPORTANT !!!  
// At the top of your script, include the DARTs namespace  
using DARTs;
```

```
// If a message line exceeds 100 characters in length, it is split into multiple lines.
```

```
// Usage  
DABug.Log(my_str);
```

```
// OR use the quick-type usage:  
a.s(my_str);
```

```
// String  
string my_str = "Have a nice day!";  
DABug.Log(my_str);  
or  
a.s(my_str);
```

Have a nice day!

```
// Integer  
int my_int = 123456;  
DABug.Log(my_int);
```

123456

```
// Float  
float my_flt = 654.321f;  
DABug.Log(my_flt);
```

654.321



Collections

While the DABug() command quickly displays simple strings and numbers, it can also display a limited amount of other simple variable types, without having to iterate through the collections with code.

```
// String Array
string[] my_str_arr = {"Antelope", "Brown Bear", "Chimpanzee", "Dolphin", "Elephant",
"Flamingo", "Giraffe"};
DABug.Log(my_str_arr);
```

```
0: Antelope
1: Brown Bear
2: Chimpanzee
3: Dolphin
4: Elephant
5: Flamingo
6: Giraffe
```

```
// You can always loop through the collection yourself with code
foreach(string item in my_str_arr) {
    DABug.Log(item);
}
```

```
Antelope
Brown Bear
Chimpanzee
Dolphin
Elephant
Flamingo
Giraffe
```

Appendix B: Code Samples (C#) continued

Results are colored red



```
// Integer Array
```

```
int[] my_int_arr = new int[10];  
for (int i=0; i<=9; i++) my_int_arr[i] = Random.Range(0,1000000);  
DABug.Log(my_int_arr);
```

```
0: 792042  
1: 179577  
2: 141550  
3: 536760  
4: 757294  
5: 282339  
6: 556744  
7: 373804  
8: 536689  
9: 738625
```

```
// List<string>
```

```
List<string> my_list_str = new List<string>();  
my_list_str.Add("Apple");  
my_list_str.Add("Orange");  
my_list_str.Add("Lemon");  
my_list_str.Add("Banana");  
my_list_str.Add("Peach");  
my_list_str.Add("Cherry");  
DABug.Log(my_list_str);
```

```
0: Apple  
1: Orange  
2: Lemon  
3: Banana  
4: Peach  
5: Cherry
```

```
// Dictionary<string, string>
```

```
Dictionary<string, string> my_dct_ss = new Dictionary<string, string>();  
my_dct_ss.Add("Ag", "Silver");  
my_dct_ss.Add("Au", "Gold");  
my_dct_ss.Add("Ba", "Barium");  
my_dct_ss.Add("H", "Hydrogen");  
my_dct_ss.Add("O", "Oxygen");  
my_dct_ss.Add("Pb", "Lead");  
my_dct_ss.Add("U", "Uranium");  
my_dct_ss.Add("Zn", "Zinc");  
DABug.Log(my_dct_ss);
```

```
Ag: Silver  
Au: Gold  
Ba: Barium  
H: Hydrogen  
O: Oxygen  
Pb: Lead  
U: Uranium  
Zn: Zinc
```



Appendix B: Code Samples (C#) continued

Results are colored red



```
// Dictionary<string, object>
Dictionary<string, object> my_dct_so = new Dictionary<string, object>();

Dictionary<string, string> my_record_0 = new Dictionary<string, string>();
my_record_0.Add("Name", "Dexter Campbell");
my_record_0.Add("Addr", "110 S. Wabash");
my_record_0.Add("City", "Chicago");
my_record_0.Add("State", "IL");
my_record_0.Add("Zip", "60603");
Dictionary<string, string> my_record_1 = new Dictionary<string, string>();
my_record_1.Add("Name", "Rosa Lucas");
my_record_1.Add("Addr", "166 Central Ave.");
my_record_1.Add("City", "Charleston");
my_record_1.Add("State", "SC");
my_record_1.Add("Zip", "29406");
Dictionary<string, string> my_record_2 = new Dictionary<string, string>();
my_record_2.Add("Name", "Molly Weber");
my_record_2.Add("Addr", "609 S. 5th Street");
my_record_2.Add("City", "Clarksburg");
my_record_2.Add("State", "WV");
my_record_2.Add("Zip", "26301");
Dictionary<string, string> my_record_3 = new Dictionary<string, string>();
my_record_3.Add("Name", "Laurence Santos");
my_record_3.Add("Addr", "251 S Madison Ave");
my_record_3.Add("City", "Yuma");
my_record_3.Add("State", "AZ");
my_record_3.Add("Zip", "85364");

my_dct_so.Add("2000", my_record_0);
my_dct_so.Add("2001", my_record_1);
my_dct_so.Add("2002", my_record_2);
my_dct_so.Add("2003", my_record_3);
DABug.Log(my_dct_so);
```

```
2000:
Name: Dexter Campbell
Addr: 110 S. Wabash
City: Chicago
State: IL
Zip: 60603
2001:
Name: Rosa Lucas
Addr: 166 Central Ave.
City: Charleston
State: SC
Zip: 29406
2002:
Name: Molly Weber
Addr: 609 S. 5th Street
City: Clarksburg
State: WV
Zip: 26301
2003:
Name: Laurence Santos
Addr: 251 S Madison Ave
City: Yuma
State: AZ
Zip: 85364
```

Appendix B: Code Samples (C#) continued

Results are colored red



```
// List<object>
List<object> my_list_obj = new List<object>();
my_list_obj.Add("Have a nice day!");
my_list_obj.Add(12345);
my_list_obj.Add(my_dct_ss);
my_list_obj.Add(my_str_arr);
DABug.Log(my_list_obj);
```

```
0:
Have a nice day!
1:
12345
2:
Ag: Silver
Au: Gold
Ba: Barium
H: Hydrogen
O: Oxygen
Pb: Lead
U: Uranium
Zn: Zinc
3:
0: Antelope
1: Brown Bear
2: Chimpanzee
3: Dolphin
4: Elephant
5: Flamingo
6: Giraffe
```

Appendix B: Code Samples (C#) continued

Results are colored red



```
// Control commands
```

```
DABug.Log("#show#");
```

```
// or
```

```
a.s("#show#");
```

The DABug window is visible (active)

```
DABug.Log("#hide#");
```

The DABug window is hidden (inactive)

```
DABug.Log("#flip#");
```

The DABug window visibility is reversed (active/inactive)

```
DABug.Log("#clear#");
```

The DABug window text is cleared

```
DABug.Log("#copy#");
```

The DABug window text is copied to clipboard

```
DABug.Log("#bl#");
```

The DABug window is positioned to the screen bottom left

```
DABug.Log("#br#");
```

The DABug window is positioned to the screen bottom right

```
DABug.Log("#tl#");
```

The DABug window is positioned to the screen top left

```
DABug.Log("#tr#");
```

The DABug window is positioned to the screen top right