

Symbol / Name	Address	What is in the memory of the computer				Value As Interpreted by Type Comments
		Byte 1	Byte 2	Bite3	Bite4	
Code Block						
PrintAllStaticAndGlobalAddresses	008A1019	??	??	??	??	A bunch of binary commands No Parameters
...	...	??	??	??	??	
PrintAllFunctionAddresses	008A1131	??	??	??	??	A bunch of binary commands No Parameters
...	...	??	??	??	??	
Cat::Speak	008A12A8	??	??	??	??	A bunch of binary commands Hidded Cat* this parameter
...	...	??	??	??	??	
PassingParameters	008A12EE	??	??	??	??	A bunch of binary commands See Declaration for parameters
...	...	??	??	??	??	
Dog::Speak	008A1492	??	??	??	??	A bunch of binary commands Hidded Dog* this parameter
...	...	??	??	??	??	
main	008A14B0	??	??	??	??	A bunch of binary commands No Parameters
...	...	??	??	??	??	
Animal::Speak	008A1532	??	??	??	??	A bunch of binary commands Hidded Animal* this parameter
...	...	??	??	??	??	
AnotherFunc	008A1578	??	??	??	??	A bunch of binary commands No Parameters
...	...	??	??	??	??	

More including constructs but we can't get their address I don't believe.

Static Global Block						
int Animal::AnimalCount	008B5384	00	00	00	00	Initially 0
Cat Pablo / Pablo Virtual Table Ptr	008B5388	??	??	??	??	Address for Virtual Table Size is 16 (4 for Virtual table ptr, 4 for int Age, 4 for int Lives, 4 for int Sleep hours)
->Age	008B538C	00	00	00	01	
->Lives	008B5390	00	00	00	9	
->SleepHours	008B5394	00	00	00	14	

Stack - Functions are laid out in a decending order with values acending within each function

Stack - Main Function

Local Variables

Animal* myAnimalPtr	009BF714	??	??	??	??	Address for Virtual Table
Dog Gizmo / Virtual Table Ptr	009BF720	??	??	??	??	
->Age	009BF724	00	00	00	01	
->NumberOfTreats	009BF728	00	00	00	00	

Stack - PassingParameters Function

Parameters

int MyIntPtrParam	009BF5F0	00	00	00	01	1
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```
Animal* AnyAnimalParam
Cat CatOneParam / Virtual Table Ptr
->Age
->Lives
->SleepHours
MyMiddleParam
MyMiddleParam2
Cat& CatTwoParam
MyLastParam
```

Local Variables

```
int LocalInt
```

```
int* myPtr
```

```
Dog* myDogPtr
```

Stack - AnotherFunc Call 1

```
int myNewInt
```

009BF5F4	00	9B	F7	20
009BF5F8	??	??	??	??
009BF5FC	00	00	00	01
009BF600	00	00	00	9
009BF604	00	00	00	14
009BF608	00	00	00	04
009BF60C	00	00	00	05
009BF610	00	8B	53	88
009BF614	00	00	00	03

009BF720
Address for Virtual Table

This is the address of Gizmo

4

5

This is the address of Pablo

3

2

This is the address of Cat&
CatTwoParam that we calculated
The address of the dog created on the
Heap

009BF610

00D33C10

009BF5D0	00	00	00	02
009BF5C4	00	9B	F6	10
009BF5B8	00	D3	3C	10
009BF4A8	00	00	00	05

Stack - AnotherFunc Call 2

```
int myNewInt
```

009BF604	00	00	00	05
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This is the same address as CatOneParam->SleepHours because that memor location is being reused after being removed from the stack

Heap

```
New Dog() / Virtual Table Ptr
->Age
->NumberOfTreats
```

00D33C10	??	??	??	??
00D33C14	00	00	00	01
00D33C18	00	00	00	00

Address for Virtual Table