```
// For a class method:
*bar {
    this.deprecated(thisMethod, OtherClass.class.findMethod(\bar));
}
```


## Printing and Introspection

. post
Print a string representation of the receiver to the post window.
"hello". post; "hello".post; "'";

## . postln

Print a string representation of the receiver followed by a newline.
"hello". postln; "hello".postln; ""';

## . postc

Print a string representation of the receiver preceded by comments.
"hello". postc; "hello".postc; ""';

## . postcln

Print a string representation of the receiver preceded by comments, followed by a newline.
"hello". postcln; "hello".postcln; ""';

## . postcs

Print the compile string representation of the receiver, followed by a newline.
"hello".postcs; "hello".postcs; ""';
. dump
Print a detailed low level representation of the receiver to the post window. Except for the List class, this method is not overridden in other classes. Any of the MetaClasses, Classes and Instances can be used by this method.

Meta_Object.dump // the meta class of the class Object

Object.dump // the class called Object

Object.new.dump // an istance of the class Object

## Discussion:

- The detailed low level format and information varies depending on the receiver.
- Some instance objects, especially unique objects, return the class name and value (also low data if necessary) of the dumped object:
1.0. dump

64-bit version of SuperCollider returns:
Float 1.00000000000000 3FF00000
$\rightarrow 1.0$
The last two groups of an 8-digit integer are the raw hexadecimal representation of the 64-bit double value according to IEEE 754 Floating Point (https://ieeexplore.ieee.org/document/8766229). Each part is represented as follows:

|  |  | raw hexadecimal representation of the 64-bit double value |  |
| :---: | :---: | :---: | :---: |
| Float | -1.000000 | 00000000 | 3FF00000 |
| \| | I | \| |  |
| class | decmial | significant part | exponent |
|  | representation | (mantissa) | with sig |

Integer

```
1. dump
    Integer 1
-> 1
```

Char
\$1. dump
Character 49 '1'
-> 1
The integer between Character and ' 1 ' is the ASCII value of that character.

## Symbol

```
\1.dump
    Symbol '1'
-> 1
```

- Some instance objects return more detailed information, such as
- addrress in virtual memory (the hexadecimal number prefixed with $0 x$ ),
- garage collector color (gc),
- data format type (fmt),
- flags for immutablity, finalization and garbage collector debug sanity check (flg),
- size class (set),
- and so on (the information on the second and subsequent lines varies depending on the class to which the instance belongs)
with the class name of the instance:
Array

```
[1, 2].dump;
```

```
Instance of Array { (0x1552c9558, gc=78, fmt=01, flg=00, set=02)
```

Instance of Array { (0x1552c9558, gc=78, fmt=01, flg=00, set=02)
indexed slots [2]
indexed slots [2]
0 : Integer 1
0 : Integer 1
1 : Integer 2
1 : Integer 2
}
}
-> [1, 2]

```
-> [1, 2]
```

List

```
List's array:
Instance of Array { (0x13b3cb5b8, gc=6C, fmt=01, flg=00, set=02)
    indexed slots [2]
                0 : Integer 1
        1 : Integer 2
}
-> List[1, 2]
```

Set

```
Set[1, 2].dump;
```

```
Instance of Set { (0x1489e2068, gc=A4, fmt=00, flg=00, set=02)
    instance variables [2]
        array : instance of Array (0x13b458838, size=4, set=2)
        size : Integer 2
}
->> Set[2, 1]
```


## System Information

## . gcInfo

Posts garbage collector information in a table format.

## Discussion:

- flips: the number of times the GC "flipped", i.e. when it finished incremental scanning of all reachable objects
- collects: the number of partial collections performed
- nalloc: total number of allocations
- alloc: total allocation in bytes
- grey: the number of "grey" objects, i.e. objects that point to reachable objects and are not determined to be (un)reachable yet

Then for each size class: numer of black, white and free objects, total number of objects and the total set size.

|  | ps 241 |  | Olects | 689096 | nalloc | 40173511 | alloc 322496998 | grey 346541 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | bwf t | sz: | 882 | 0 | 368573 | 369455 | 2955640 |  |
| 1 | bwf t | sz: | 6197 | 122 | 5702377 | 5708696 | 91339136 |  |
| 2 | bwf t | sz: | 947 | 4 | 1500009 | 1500960 | 48030720 |  |
| 3 | bwf t | sz: | 8056 | 65201 | 301800 | 375057 | 24003648 |  |
| 4 | bwf t | Sz: | 4047 | 145 | 3457 | 7649 | 979072 |  |
| 5 | bwf t | Sz: | 422 | 1 | 431 | 854 | 218624 |  |
| 6 | bwf t | Sz: | 124 | 2 | 72 | 198 | 101376 |  |
| 7 | bwf t | Sz: | 153504 | 1 | 0 | 153505 | 157189120 |  |
| 8 | bwf t | Sz: | 22 | 0 | 0 | 22 | 45056 |  |
| 9 | bwf t | sz: | 5 | 0 | 0 | 5 | 20480 |  |
| 10 | bwf t | t sz: | 5 | 0 | 0 | 5 | 40960 |  |
| 12 | bwf t | t sz: | 2 | 0 | 0 | 2 | 65536 |  |
| 13 | bwf t | t sz: | 1 | 0 | 0 | 1 | 65536 |  |
| 19 | bwf t | t sz: | 1 | 0 | 3 | 4 | 16777216 |  |
| tot | bwf t | t sz: | 174215 | 65476 | 7876722 | 8116413 | 341832120 |  |

You can also query the amount of free memory with Object. totalFree and dump the currently grey objects with Object. dumpGrey. More memory status methods are: largestFreeBlock, gcDumpSet, and gcSanity.

## Iteration

