* [How to calculate memory usage of a Java object?](http://www.javamex.com/tutorials/memory/object_memory_usage.shtml" \t "_blank): Very simplified explanation of how one could calculate a memory of any Java object. For example, lets say, you want to calculate the memory of a Java object which holds two int variables, one boolean variable, one Long object, and a reference to other objects. The memory would turn out to be following:
  + 8 bytes for the object header
  + 2 x 4 = 8 bytes for two int variables
  + 1 byte for a boolean variable
  + 8 bytes (object reference) + 8 bytes for long data type = 16 bytes for long object
  + 4 bytes for reference to some other object
  + The total size of the above mentioned object will be 8 + 8 + 1 + 16 + 4 = 37 bytes + 3 bytes (for padding) = 40 bytes.
* [How to calculate memory usage of a Java array?](http://www.javamex.com/tutorials/memory/array_memory_usage.shtml): The page presents examples on how to calculate size of a Java array object. For example, lets say a Java array consisting of 20 Integer objects. Following is the detail on the size:
  + 12 bytes for array header object (8 bytes for header and 4 bytes for storing length of the array)
  + 20 x 16 bytes = 320 bytes for integer objects.
* The total size of the said Java array object = 12 + 320 bytes = 332 bytes + 4 bytes (padding) = 336 bytes.

ALOSOOOOOOOOOOOOOOOOOOOOOOOOOO

To get the size of the object in java. There is a predefined interface called Instrumentation which is located in java.lang.intrument.Instrumentation,

To get the size of object following code snippet can work-

1, Class with intrumentation method

1. **import** java.lang.instrument.Instrumentation;
2. **public** **class** ObjectSizeFetcher {
3. **private** **static** Instrumentation instrumentation;
4. **public** **static** **void** premain(String args, Instrumentation inst)
5. {
6. instrumentation = inst;
7. }
8. **public** **static** **long** getObjectSize(Object o)
9. {
10. **return** instrumentation.getObjectSize(o);
11. }
12. }
13. // Class using method defined in above class
14. **public** **class** C {
15. **private** **int** x;
16. **private** **int** y;
17. **public** **static** **void** main(String [] args)
18. {
19. System.**out**.println(ObjectSizeFetcher.getObjectSize(**new** C()));
20. }
21. }