Hw8

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4. How are standard methods like String.toUpperCase() incorporated into the JVM?

.method public toUpperCase(S)S

5. What is the difference between a field and a local variable?

fields within classes are named, not numbered

6. What is the difference between invokevirtual and invokestatic?

From the programmer's viewpoint, there is no difference between invokevirtual and invokespecial, but our standard boilerplate code

7. Why do static methods take one fewer than nonstatic arguments?

Because for static methods the object is in location 0.

8. What is the corresponding type string for the following methods?

a. float toFloat(int) → **.method public toFloat(F)I**
b. void printString(String) → **.method public printString(S)S**
c. float average(int, int, int, int) → **.method public average(IIII)I**
d. float average(int []) → **.method public average([I)F**
e. double [][] convert(long [][]) → **.method public convert([[L)[[D**
f. boolean isTrue(boolean) → **.method public isTrue(Z)Z**

9. What is special about the <init> method?

It is invoked with invokespecial