

6. What's the difference between goto and goto_w? Is there a corresponding ifnew?

The goto instruction offset is stored as a short int. The goto_w instruction offset is stored as a 32 bit integer. If the necessary offset would be too large to fit into a short, then it will automatically translate the programmer's goto into a machine-internal goto_w. There is no ifne_w instruction in the JVM.

7. The code in Figure 4.8 uses irem to determine if a number is odd or even. Juola's law of multiple cat skinning states that there's always at least one more way to do anything. Can you find a way to use iand to determine if a number is odd or even? How about using ior?

iand -> If n = odd, result of iand = 1. If n = even, result of iand = 0.

ior -> if n = even, result of ior = 0. If n = odd, result of ior = 1.

8. How about using shift operations?

9. What is the error in Figure 4.14? What is the solution?

; never forget to cite your sources

ldc "(from Jabberwocky, by Lewis Carroll)"

--→ MISSING: jsr PrintString ←--

10. Do the semantics of jsr and ret as presented in this chapter support recursion? Explain.