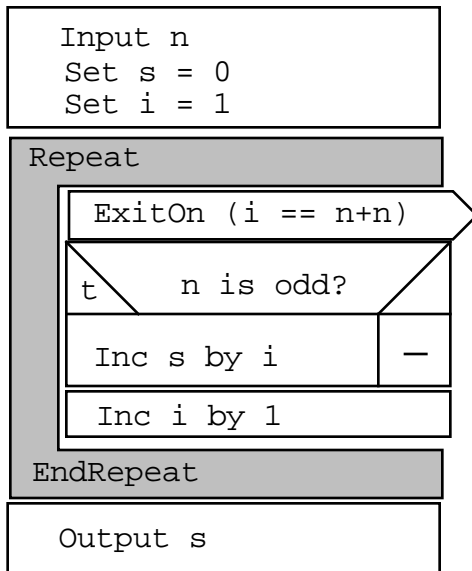


Problems from the previous final

1. Trace and Code Loop

Trace the following algorithm for $n = 4$.

Code this program in Java, assuming all integers.

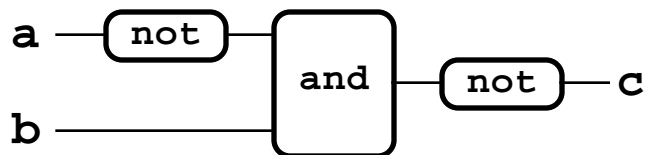
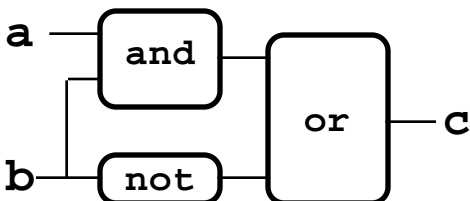


2. Logical Equivalence

Prove whether or not the following diagrams are logically equivalent.

Then write the not (negative or complement) of each of them, using DeMorgan's law.

Finally, create another simpler diagram equivalent to the second one (at the right).



3. Money Methods

Write a function in Java to convert any given number of pennies, nickels, dimes and quarters into their total worth, in cents.

Write a routine in Java to convert any number of cents into their number of pennies, nickels, dimes, and quarters.