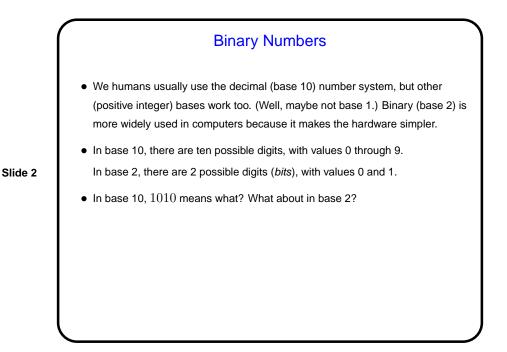
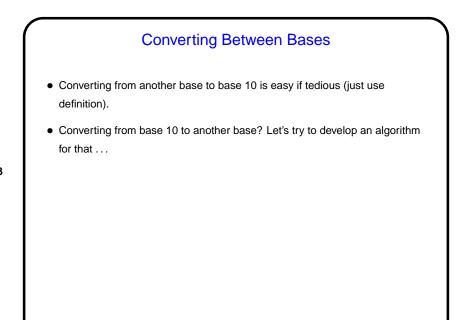


Slide 1





Slide 3

Slide 4

Decimal to Binary, Take 1
 One way is to first find the highest power of 2 smaller than or equal to the number, write that down, subtract it from the number, and continue.
• We could write this in <i>pseudocode</i> thus (letting <i>n</i> be the number we want to convert:
while $(n > 0)$
find largest p such that $2^p \leq n$
write a 1 in the p -th output position
subtract 2^p from n
end while
• Is this okay? What's not quite right about it? (We don't say what to put in the
positions that don't have ones in them.)
• (Example.)

