Using Subprocedures

In the "village" and "house" project, we wrote procedures to make the different parts of our village: windows, doors, house frames, roofs and houses. These procedures defined the basic building blocks of the models we were creating and they saved us time. Instead of repeatedly typing the "fd", "rt", and "lt" commands to make our three windows, we could bundle the commands for a window into a procedure, give it a name, and then use that name anytime we wanted to run that bundle of commands.

Your "house" procedure may have looked something like this:

to **draw-a-house**
   pd
   draw-a-house-frame
   fd 9
   draw-a-roof
   bk 9
   pu
   rt 90
   fd 3
   lt 90
   draw-a-door
   pu
   lt 90
   fd 2
   rt 90
   fd 3
   repeat 3 [
         draw-a-window
         pu rt 90
         fd 2
         lt 90
   ]
   bk 3
   lt 90
   fd 7
   rt 90
end

It may not have seemed like a big deal to write out the same set of commands three times. But in a bigger or more complex model, there might be many more repetitions of a particular set of commands, and bundling them could save lots of time!

Look at the pictures below. What's different about these models from the ones you've done? Will it take longer to write the procedures for these new models? Why? or Why not? Do you have any ideas about how to build these models as quickly and easily as possible? Is there anything from your previous models that you can use?

Try it!

The houses in this village are just like the ones in the original model, except for an extra dor and row of windows.
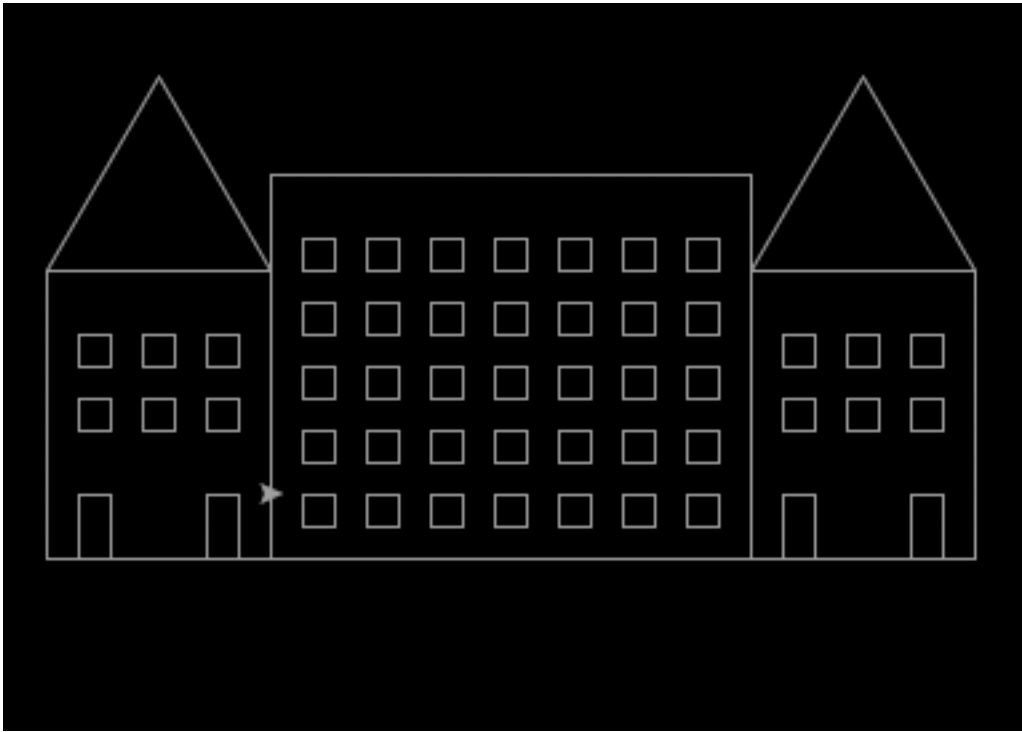
This might be a castle, or a hotel. Lots of doors and windows!