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| **Helpful code:**   |  | | --- | | **while loop**  init statement  while(boolean exp) {  //statements  final statement  }    **for loop**  for(init statement; boolean exp; final statement) {  //statements  } | |  | | **// Overview**  In this exercise you will write a program that repeats a pattern made of primitive shapes such as lines, rectangles, triangles and ellipses to create an *electronic quilt* that fills a 800 x 800 sketch. Use loops to streamline coding repetitive tasks. Create three beautiful patterns: 2 static, and 1 animated.  **// Process to Follow**   1. Sketch each design on white unruled paper (your sketch book). Iterate your design using 10-20 thumbnails for each design. 2. Transfer design to graph paper to plan out the math. 3. Write pseudo code next to the design on graph paper. 4. Translate pseudo code to Processing code.   Start with a 100 x 100 design (something that will look great with  repetition). Keep the design simple but attractive. **The coordinates of**  **the shape must be based on variables (so they can be updated).**  Look for values that have a mathematical pattern that can become variables. Ask “what if …” to visually explore and iterate the design. For example, start with 5 concentric circles, and ask what if the center of the circles shifted little by little in some mathematical way.  \*  Begin all sketches with comments that include your name, date and a description of the sketch.  *Keep all techniques within the chapter topics (no random, no mouse actions this time.)*  Each piece can stand alone or share a set of visual properties.  Focus on design principles    Push the limits  **// A total of sketches:**   1. Static (ex 3\_1.pde) 2. Static (ex 3\_2.pde) 3. Animated (ex 3\_3.pde)   **// Digital submit: 3 pde files**  Create a folder titled “lastName firstName”, and drop it off at:  design\_scratchy >\_DES Class Files > DES 37 Wntr 2016 Young >  Submit Homework > Ex 3 eQuilt.  **// Analog submit: paper sketches and color printout**  White paper sketchbook sketches showing 10-20 thumbnails per design.  Graph paper sketches should include pseudo code.  Code to export tif: saveFrame (“frames/####.tif”);  Use Adobe Illustrator layout template provided for printout. For the time-based piece, choose your favorite frame. |
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