I have always loved watching birds in my backyard. My dad has always really enjoyed studying different kinds of birds, so I have grown up watching birds with him every weekend. We used to put different birdseed into our birdhouse and see what different kinds of birds showed up. This is why I chose to make a birdhouse for my final project. This birdhouse has four sides and a roof, with a perch and a hole for birds to go inside for food. The first time I made a rendering, I made a 3d rendering which I figured out could not be easily transitioned into 2d parts that I could laser cut, so I made new parts, putting every part in its own file. After my presentation, Professor Touretzky said that I needed to make tabs so that the birdhouse will fit together and look good. I had to change what I had so that there were tabs on each part that fit in with each other. I created an 8inx8in birdhouse in which you can’t see the side parts, and where the roof fits on top of the sides. With the roof, Meg was able to help me decide to have a roof with one side bigger than the other so that it fits perfectly together. I originally had a roof that was 3 inches high and 8 inches wide, but that gave me 3-4-5 triangles, which meant that the roof would not fit together very well with tabs. I later had to change my roof height to 4 inches in order to have 45-45-90 triangles so that the roof would fit together perpendicularly and would allow me to use tabs in a way where nothing was sticking out. One of the hardest parts of this birdhouse was making sure my math was right so that you as the viewer only see as few edges as possible to make it visually pleasing. In order to do this, I had to make sure I subtracted .125 inches or .250 inches from different lengths. While I had an option to use screws, I decided after talking to some of the TAs that screws might lessen the aesthetic of the birdhouse, so I decided to have tabs that fit together rather than having tabs that stuck out and needed a screw to join two parts. Also, I was excited that I was able to use a lot of things we learned in class (I have included pictures of these things in the zip file) such as extrusions, revolved cuts, fillets, trimming entities, center point arcs, mirroring entities, linear patterns. I used a revolved cut for the bird hole and for the perch. I used trimming entities for the bird’s feet to give it an illusion of having two of its feet next to each other. I used mirroring entities for the bird in order to have birds facing both directions so I could use it on the front of the birdhouse. My source of inspiration was this birdhouse, but I wanted to make it prettier than plain wood because I did not want it to be too simple. <https://img1.etsystatic.com/049/0/10814815/il_340x270.737465385_186j.jpg> Thank you so much for having me in this class! I really enjoyed it.