

ASSIGNMENT 7

1. Create a component that print the numbers from 10 to -10 counting backwards
2. Create a component that takes as inputs three numbers connected to a number slider and outputs a single point with these 3 numbers as its coordinates
3. Create a component that takes as inputs two points and creates the point in the middle. (the midpoint between two points has as coordinates the averages of the two points)
4. Create a component that generates “n” number of points between two input points. The component takes as inputs 2 points p0 and p1 connected to two rhino points in the rhino viewport and an int number connected to a number slider that determines the number of subdivisions.
5. Copy and edit part 4 to make the z coordinate of each generated point equal to the x coordinate multiplied by a number determined by another number slider
6. Make a component that takes as input a number and clamps it in the range 0.0 to 1.0. That is if the number is less than 0.0 then it should be set to 0.0 and if it is more than 1.0 then is set to 1.0.
7. Make a component that given two points it returns the point with the smallest x coordinate
8. Make a component that takes as input a list of points and 4 numbers (x0, y0, x1 y1) and makes a new list that contains only those points that are outside the rectangle (x0,y0) (x1,y1).

SUBMIT

Your rhino model along with your grasshopper file with includes 8 different components for each of the 8 problems.