



Special Project

Weaving



Prerequisite Concepts	Concept 12
Key Concepts	Concept 15,16, 18
Bricklayer Version	1.2.3 or higher

When implemented in a 32×32 virtual space, the following fabric specification creates the LEGO[®] artifact shown in Figure 1.

line1	=	(0,8+delta)	(31,8+delta)	BLUE
line2	=	(8+delta,31)	(8+delta,0)	YELLOW
line3	=	(31,7-delta)	(0,7-delta)	RED
line4	=	(7-delta,0)	(7-delta,31)	GREEN
line5	=	(0,8+delta)	(31,8+delta)	BLUE
line6	=	(24+delta,31)	(24+delta,0)	YELLOW
line7	=	(31,7-delta)	(0,7-delta)	RED
line8	=	(23-delta,0)	(23-delta,31)	GREEN
line9	=	(0,24+delta)	(31,24+delta)	BLUE
line10	=	(8+delta,31)	(8+delta,0)	YELLOW
line11	=	(31,23-delta)	(0,23-delta)	RED
line12	=	(7-delta,0)	(7-delta,31)	GREEN
line13	=	(0,24+delta)	(31,24+delta)	BLUE
line14	=	(24+delta,31)	(24+delta,0)	YELLOW
line15	=	(31,23-delta)	(0,23-delta)	RED
line16	=	(23-delta,0)	(23-delta,31)	GREEN
<i>fabric</i>	=	(
		<i>line1</i> _{z+1} ; <i>line2</i> _{x+1} ; <i>line3</i> _{z-1} ; <i>line4</i> _{x-1} ;		
		<i>line5</i> _{z+1} ; <i>line6</i> _{x+1} ; <i>line7</i> _{z-1} ; <i>line8</i> _{x-1} ;		
		<i>line9</i> _{z+1} ; <i>line10</i> _{x+1} ; <i>line11</i> _{z-1} ; <i>line12</i> _{x-1} ;		
		<i>line13</i> _{z+1} ; <i>line14</i> _{x+1} ; <i>line15</i> _{z-1} ; <i>line16</i> _{x-1} ;		
)⁴		
)₀		

Note that, when viewed in groups of 4, line groups in the fabric are very similar to one another. This suggests that a parameterized function might be created for drawing a group of lines. Before building this artifact it is recommended that you complete all Vitruvia exercises for Concepts 15, 16, and 18.



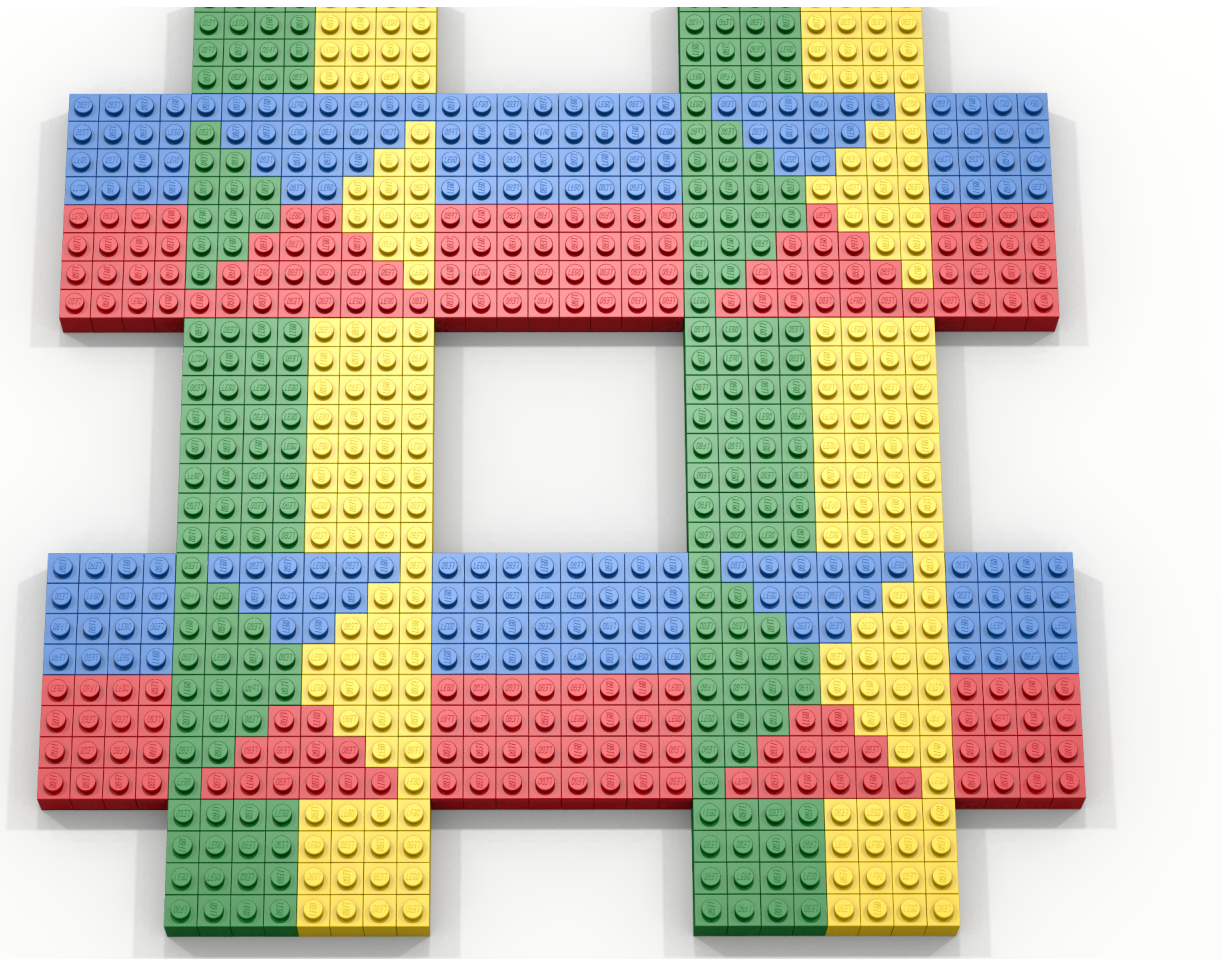


Figure 1: A *Bricklayer* fabric.