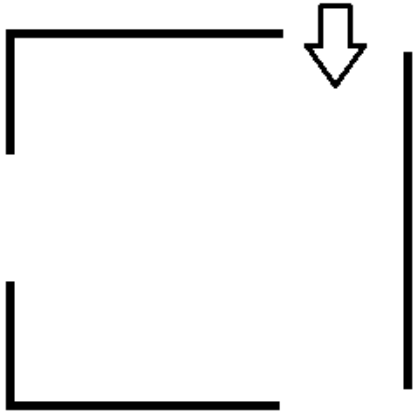
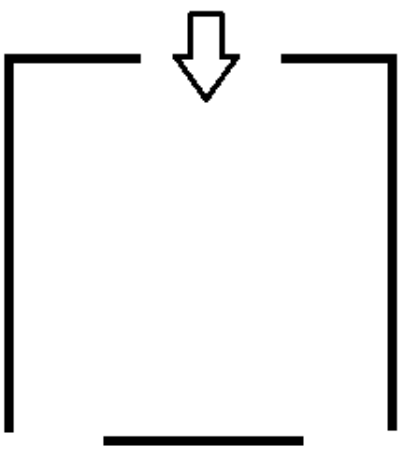
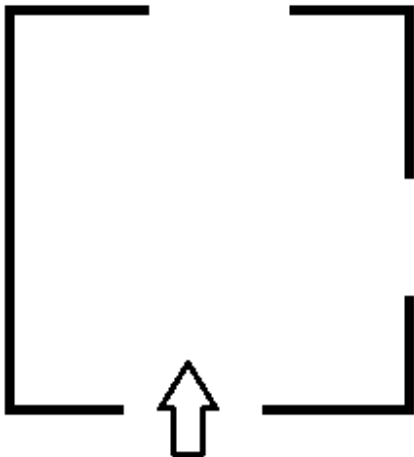
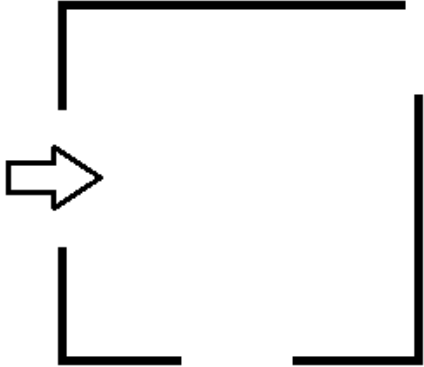
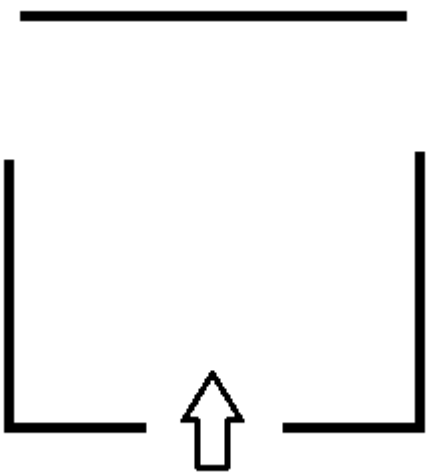
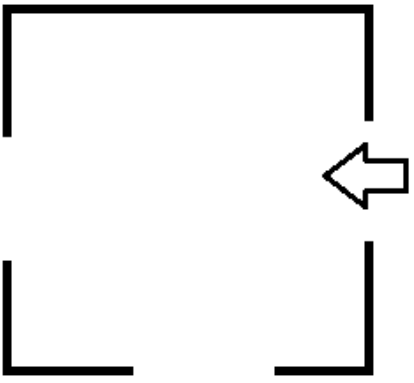


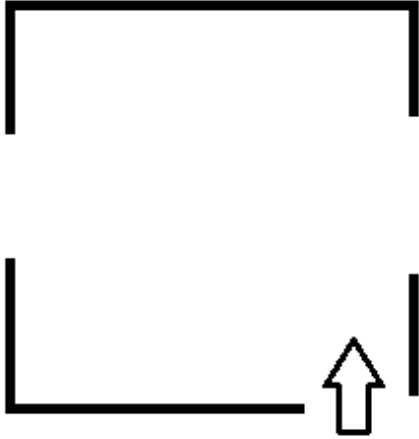
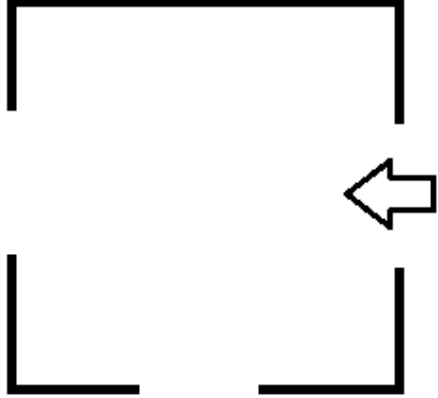
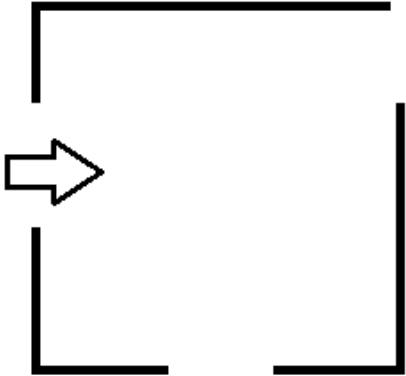
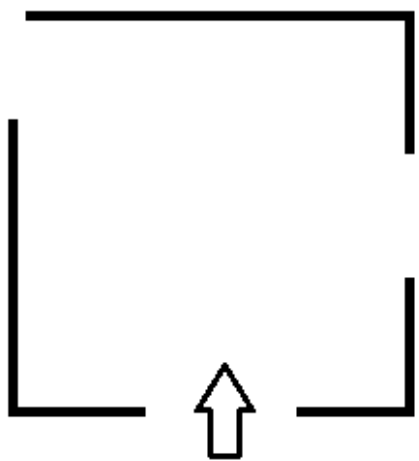
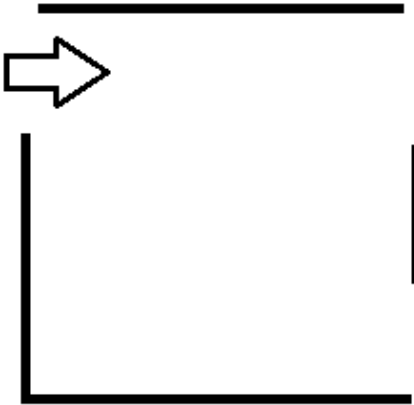
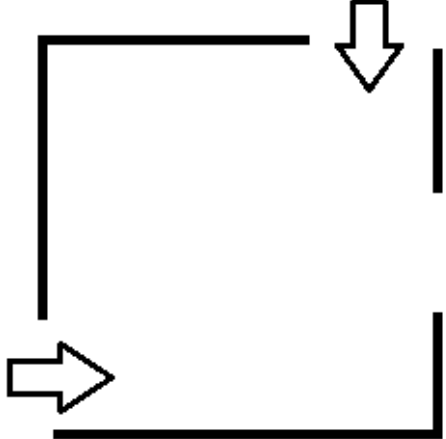
Find numerical solution (Fractional step method) of two-dimensional Burger's equation

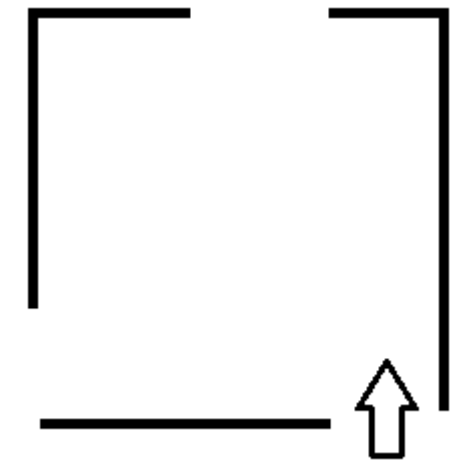
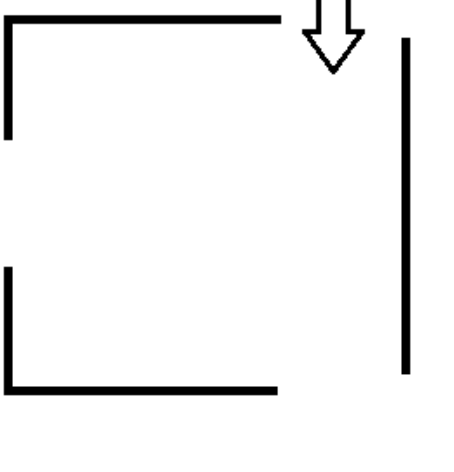
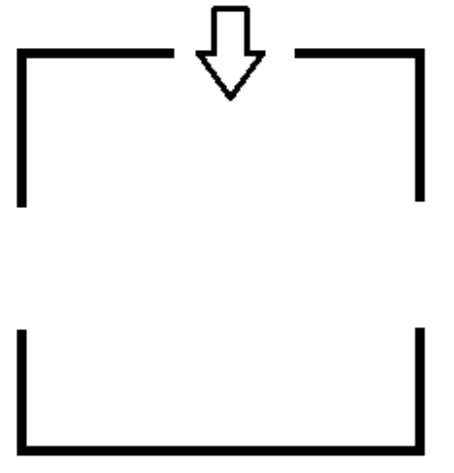
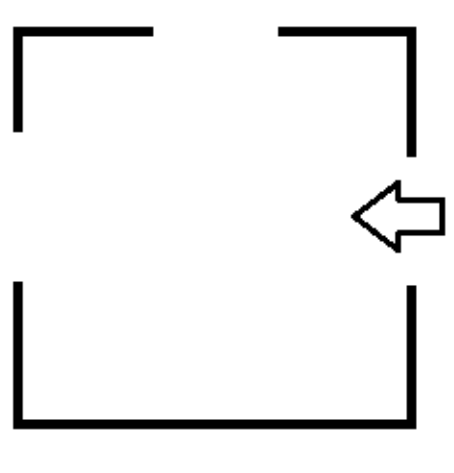
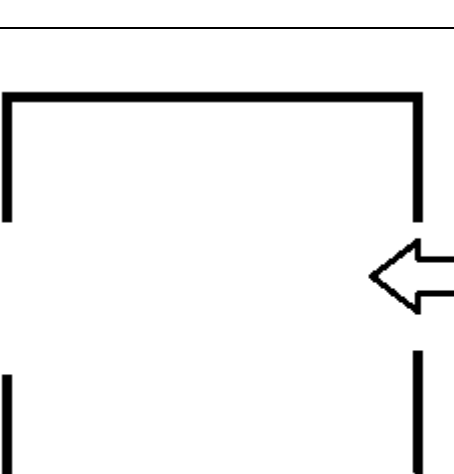
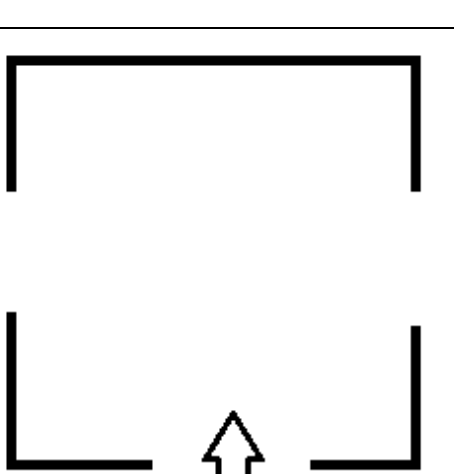
$$\frac{\partial U}{\partial t} + U \frac{\partial U}{\partial x} + V \frac{\partial U}{\partial y} = \frac{1}{\text{Re}} \left(\frac{\partial^2 U}{\partial x^2} + \frac{\partial^2 U}{\partial y^2} \right)$$

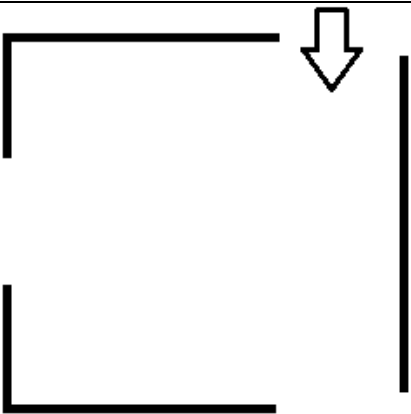
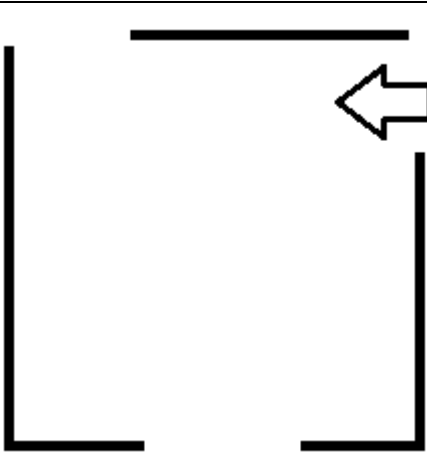
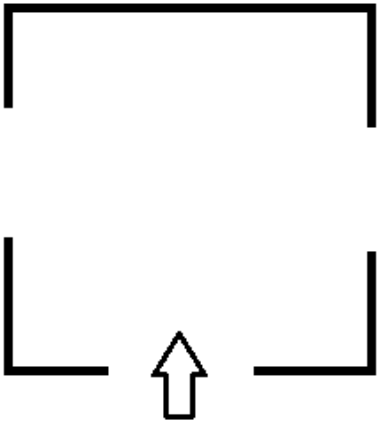
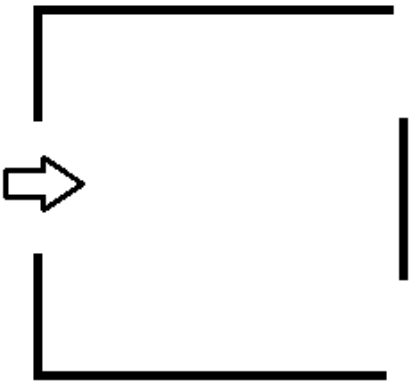
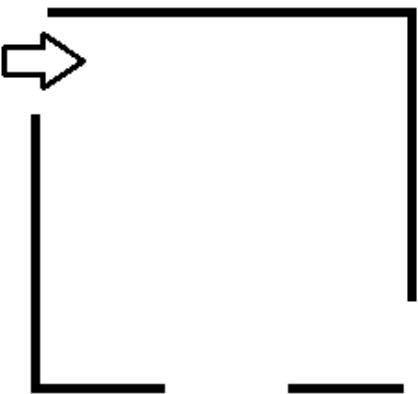
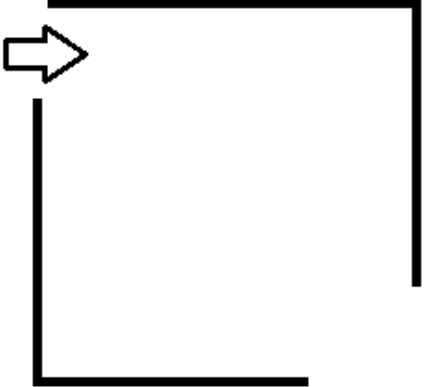
$$\frac{\partial V}{\partial t} + U \frac{\partial V}{\partial x} + V \frac{\partial V}{\partial y} = \frac{1}{\text{Re}} \left(\frac{\partial^2 V}{\partial x^2} + \frac{\partial^2 V}{\partial y^2} \right)$$

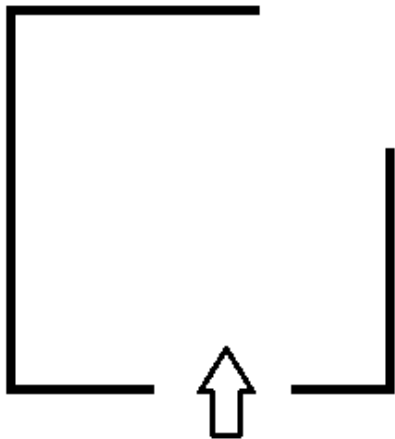
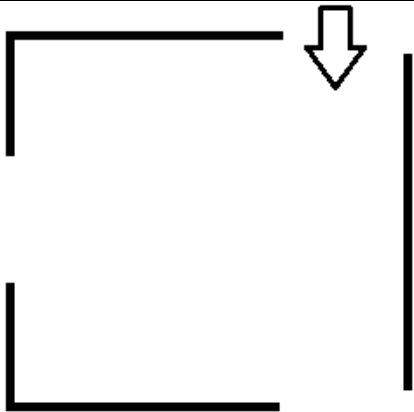
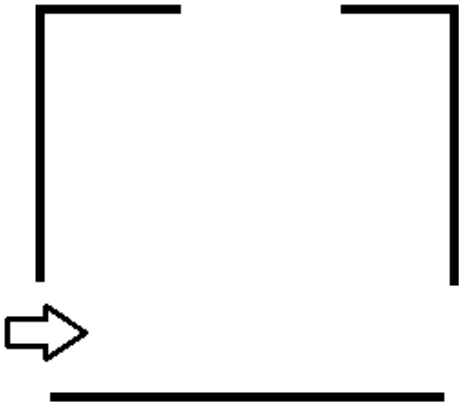
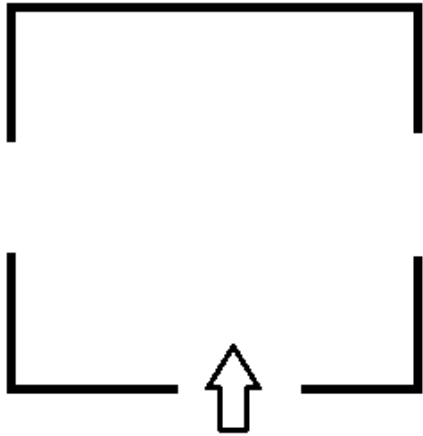
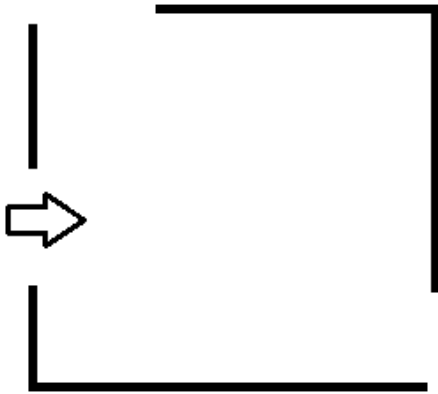
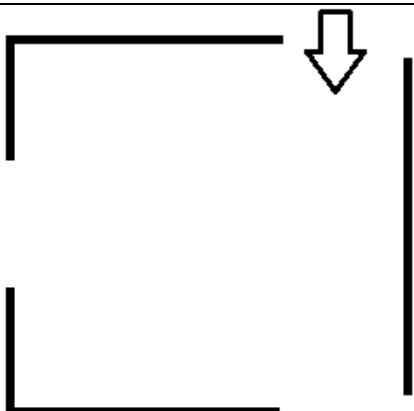
with the following boundary conditions:

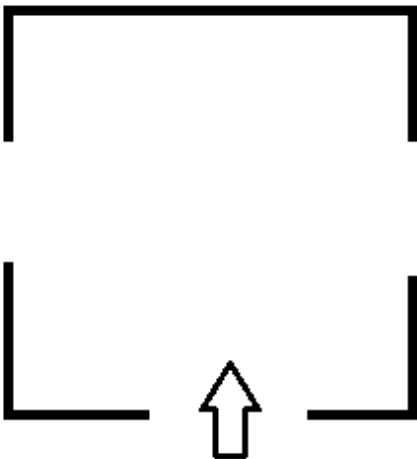
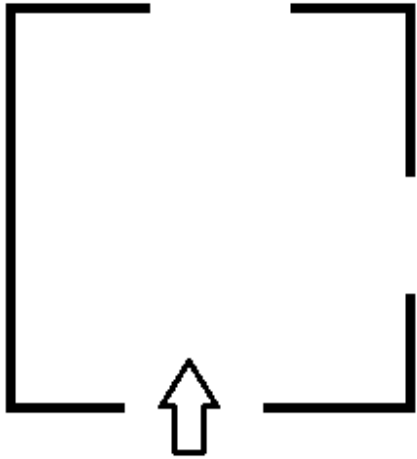
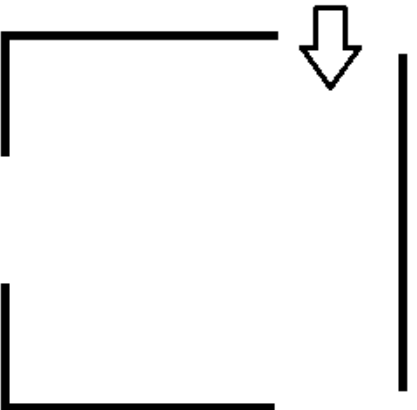
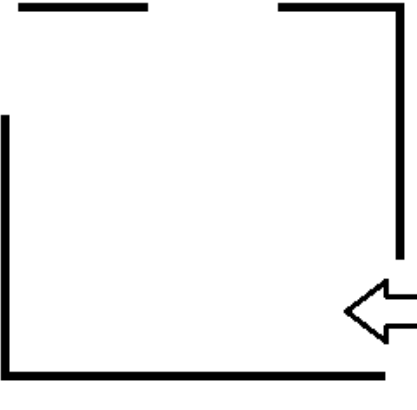
1		2	
3		4	
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13	 A square frame composed of four thick black lines. An upward-pointing arrow is positioned at the bottom center, pointing towards the bottom edge of the square.
14	 A square frame composed of four thick black lines. A downward-pointing arrow is positioned at the top center, pointing towards the top edge of the square.
15	 A square frame composed of four thick black lines. A downward-pointing arrow is positioned at the top center, pointing towards the top edge of the square.
16	 A square frame composed of four thick black lines. A leftward-pointing arrow is positioned at the right center, pointing towards the right edge of the square.
17	 A square frame composed of four thick black lines. A leftward-pointing arrow is positioned at the right center, pointing towards the right edge of the square.
18	 A square frame composed of four thick black lines. An upward-pointing arrow is positioned at the bottom center, pointing towards the bottom edge of the square.

19	 <p>A square frame with a downward-pointing arrow on the top edge.</p>	20	 <p>A square frame with a leftward-pointing arrow on the top edge.</p>
21	 <p>A square frame with an upward-pointing arrow on the bottom edge.</p>	22	 <p>A square frame with a rightward-pointing arrow on the left edge.</p>
23	 <p>A square frame with a rightward-pointing arrow on the left edge.</p>	24	 <p>A square frame with a rightward-pointing arrow on the left edge.</p>

25		26	
27		28	
29		30	

31		32	
33		34	

Draw graphs of V and U for different time moments, at least 3 moments.