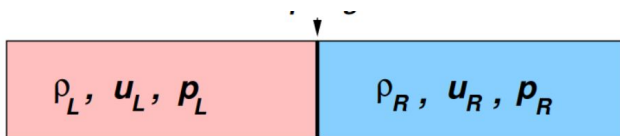
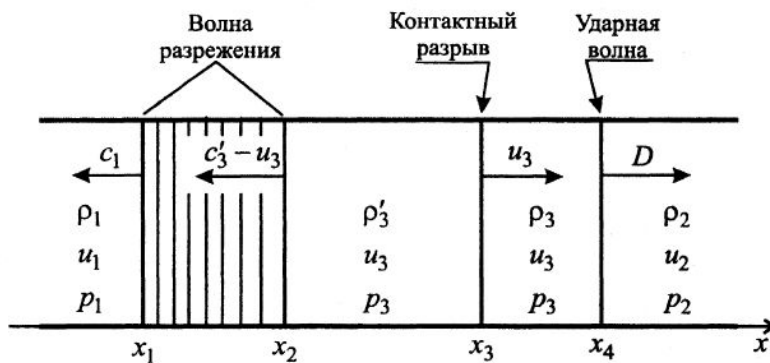


## Assumptions

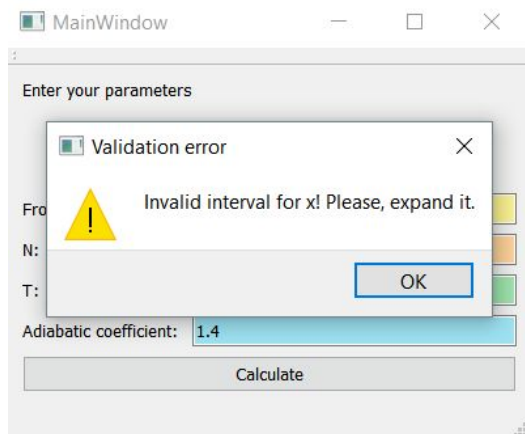
- 1) We consider that half of space is filled with gas A, another half is filled with gas B



- 2)  $x_1, x_2, x_3, x_4$  correspond to



- 3) If your left\_border is more than  $x_1$  ( $x_{\text{left}} > x_1$ ) or your right\_border is less than  $x_4$  ( $x_{\text{right}} < x_4$ ), an exception will appear.



So you should decrease your left border or increase the right one.

- 4) If your interval is correct, you will receive nice and correct charts.

- 5) Pressure  $p_3$  (fig from point (2)) is found with the help of numerical Newton method for nonlinear equations.