CS 451
Activity 16-2

[Simplex Algorithm] Solve the following LP using Simplex Algorithm

- Decision Variables:
  - x1 = number of desks produced
  - x2 = number of tables produced
  - x3 = number of chairs produced
- The LP is:

max z = $60x_1 + 30x_2 + 20x_3$

s.t.	$8x_1 + 6x_2 + x_3$	≤ 48	(lumber constraint)
	$4x_1 + 2x_2 + 1.5\,x_3$	≤ 20	(finishing constraint)
	$2x_1 + 1.5x_2 + 0.5x_3$	≤ 8	(carpentry constraint)
	x_2	≤ 5	(table demand constraint)

$x_1, x_2, x_3 \geq 0$