Step-1

Consider the problem,

Primal problem

Minimize cx *subject to* $Ax = b$ *and* $x \geq 0$

Dual problem

Maximize yb *subject to* $yA \leq c$

Step-2

Consider, $yA \leq c$

As, $x \geq 0$

$$\Rightarrow yAx \leq cx$$

$$yb \leq cx \quad (As\ Ax = b)$$

Step-3

As the primal constraint is $Ax = b$, non-negativity constraint is removed from the dual. In this case, LP is either infeasible or there is a unique solution which means all feasible solutions have same objective value.