Step-1

We have to find two points on the line of intersection of the three planes $t=0, z=0, \text{and } x+y+z+t=1$ in four dimensional space.

Step-2

Substituting $t=0, z=0$ in $x+y+z+t=1$, we get

$x+y=1$

By letting $y=0$ in $x+y=1$ gives $x=1$ then the solution becomes $(1,0,0,0)$

By letting $x=0$ in $x+y=1$ gives $y=1$ then the solution becomes $(0,1,0,0)$

Therefore the two solutions are $(1,0,0,0)$ and $(0,1,0,0)$.