Prove that the ring $B = \mathbb{C}[x,y,z,w,v]/(xyz^2 + wv)$ is not an integral extension over $\mathbb{C}[x,y,z,w]$ and then use Noether's normalization lemma to rewrite it as an integral extension of a polynomial ring.

Prove that the ring $B = \mathbb{C}[x,y,z,w,v]/(xyz^2 + w^3v)$ is not an integral extension over $\mathbb{C}[x,y,z,w]$ and then use Noether's normalization lemma to rewrite it as an integral extension of a polynomial ring.