$\sigma_{(0,1)}$'s image is span of

$$(1, 1, 0, 0, 0, 0, 0, 0), (0, 0, 1, 1, 0, 0, 0, 0), (0, 0, 0, 0, 1, 1, 0, 0), (0, 0, 0, 0, 0, 0, 1, 1),$$

$\sigma_{(0,2)}$'s image is span of

$$(1, 0, 0, 1, 0, 0, 0, 0), (0, 1, 1, 0, 0, 0, 0, 0), (0, 0, 0, 0, 1, 0, 0, 1), (0, 0, 0, 0, 0, 1, 1, 0),$$

$\sigma_{(0,3)}$'s image is span of

$$(1, 0, 0, 0, 0, 0, 0, 1), (0, 1, 0, 0, 0, 0, 1, 0), (0, 0, 1, 0, 0, 1, 0, 0), (0, 0, 0, 1, 1, 0, 0, 0),$$

$\sigma_{(1,2)}$'s image is span of

$$(1, 0, 1, 0, 0, 0, 0, 0), (0, 1, 0, 1, 0, 0, 0, 0), (0, 0, 0, 0, 1, 0, 1, 0), (0, 0, 0, 0, 0, 1, 0, 1),$$

$\sigma_{(1,3)}$'s image is span of

$$(1, 0, 0, 0, 0, 0, 1, 0), (0, 1, 0, 0, 0, 0, 0, 1), (0, 0, 1, 0, 1, 0, 0, 0), (0, 0, 0, 1, 0, 1, 0, 0),$$

$\sigma_{(2,3)}$'s image is span of

$$(1, 0, 0, 0, 1, 0, 0, 0), (0, 1, 0, 0, 0, 1, 0, 0), (0, 0, 1, 0, 0, 0, 1, 0), (0, 0, 0, 1, 0, 0, 0, 1),$$