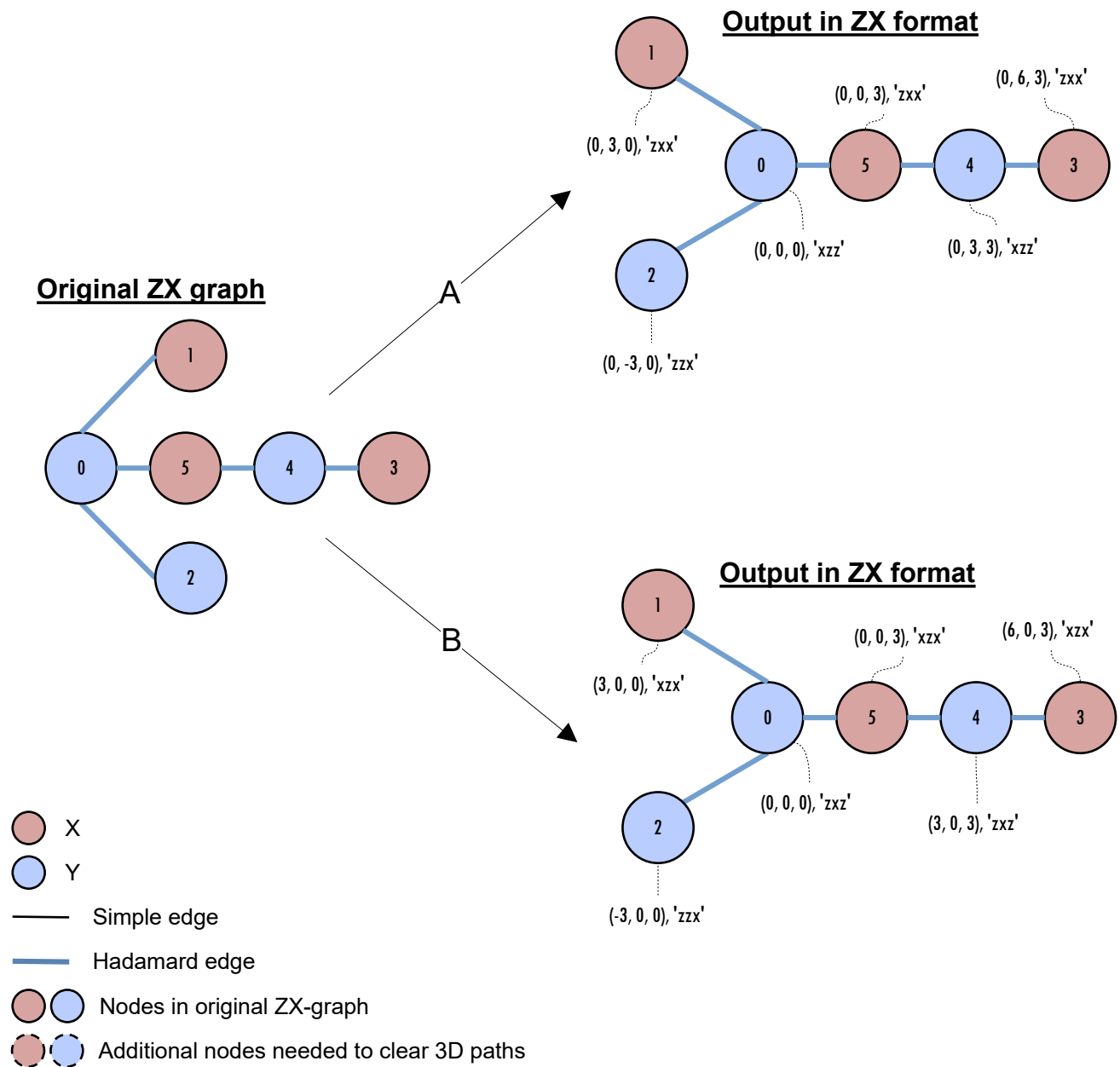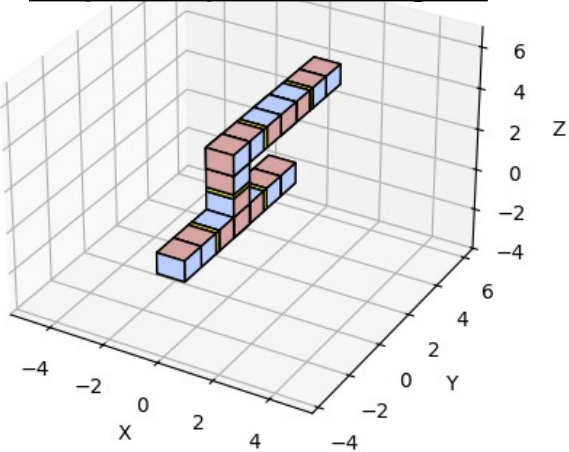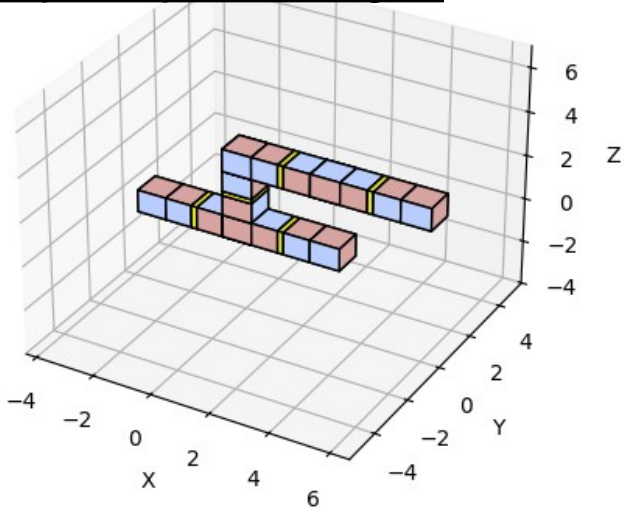# Manual validation summary – Hadamard bend

This document shows outputs by the algorithm for the declared input ZX graph. The sample of outcomes is illustrative, not comprehensive. Since the algorithm uses random choices at different stages, the range of possible outcomes is, while finite, potentially larger than shown here.

Output as space-time diagram

Output in ZX format

(0, 3, 0), 'zxx'

(0, 0, 3), 'zxx'

(0, 6, 3), 'zxx'

(0, 0, 0), 'xzz'

(0, 3, 3), 'xzz'

(0, -3, 0), 'zzx'

Original ZX graph

A

B

Output as space-time diagram

Output in ZX format

(3, 0, 0), 'xzx'

(0, 0, 3), 'xzx'

(6, 0, 3), 'xzx'

(0, 0, 0), 'zxz'

(3, 0, 3), 'zxz'

(-3, 0, 0), 'zzx'

X

Y

——— Simple edge

Hadamard edge

Nodes in original ZX-graph

Additional nodes needed to clear 3D paths

Manual validation summary – Hadamard bend

This document shows outputs by the algorithm for the declared input ZX graph. The sample of outcomes is illustrative, not comprehensive. Since the algorithm uses random choices at different stages, the range of possible outcomes is, while finite, potentially larger than shown here.
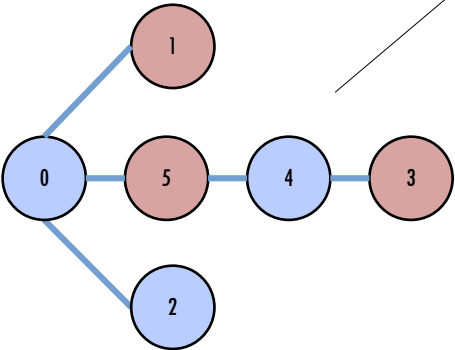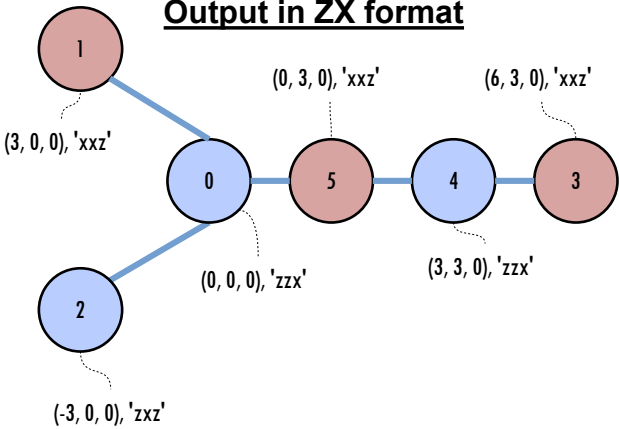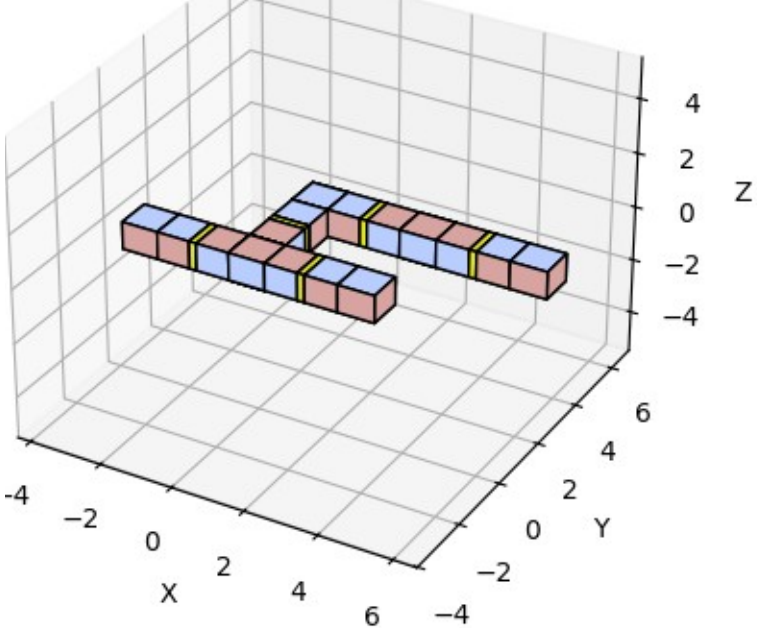
Output as space-time diagram

Output in ZX format

(3, 0, 0), 'xxz'
(0, 3, 0), 'xxz'
(6, 3, 0), 'xxz'
(0, 0, 0), 'zzx'
(3, 3, 0), 'zzx'
(-3, 0, 0), 'zxz'

Original ZX graph

A

X

Y

—— Simple edge

—— Hadamard edge

Nodes in original ZX-graph

Additional nodes needed to clear 3D paths