

Initial

X_1 X_2 X_3 X_4

Y_1 Y_2 Y_3 Y_4

Z_1 Z_2 Z_3 Z_4

First Shuffle

X_1 X_2 X_3 X_4

Y_1 Y_2 Y_3 Y_4

X_1 X_2 X_3 X_4

X_1 X_3 Y_1 Y_3

Z_1 Z_2 Z_3 Z_4

Y_1 Y_2 Y_3 Y_4

X_2 X_4 Z_1 Z_3

Z_1 Z_2 Z_3 Z_4

Y_2 Y_4 Z_2 Z_4

Second Shuffle

X_1 X_3 Y_1 Y_3

X_2 X_4 Z_1 Z_3

Y_2 Y_4 Z_2 Z_4

X_1 Y_1 Z_1 X_2

X_1 X_3 Y_1 Y_3

X_2 X_4 Z_1 Z_3

Y_2 Z_2 X_3 Y_3

Y_2 Y_4 Z_2 Z_4

Z_3 X_4 Y_4 Z_4

End

X_1 Y_1 Z_1 X_2

Y_2 Z_2 X_3 Y_3

Z_3 X_4 Y_4 Z_4