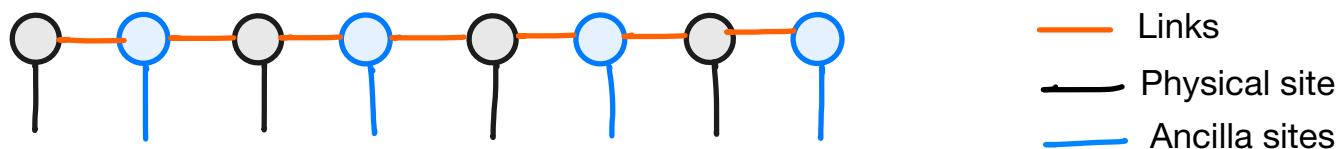
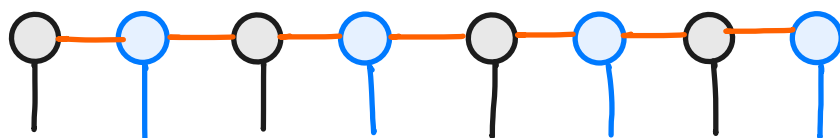




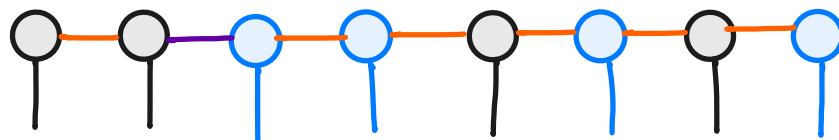
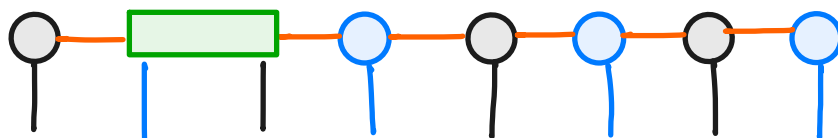
Four pairs of entangled particles



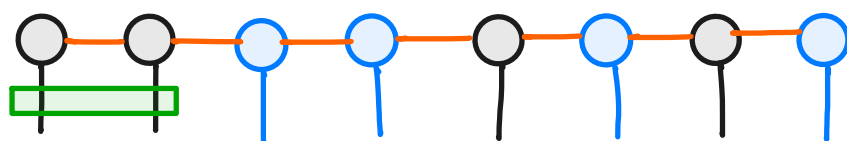
I : first swap the physical and ancilla in indices

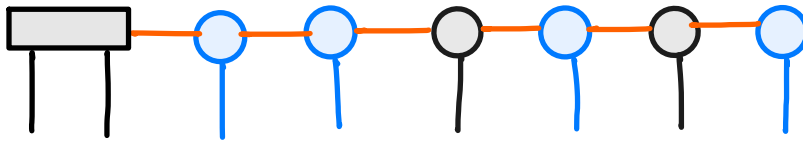


SVD of green block

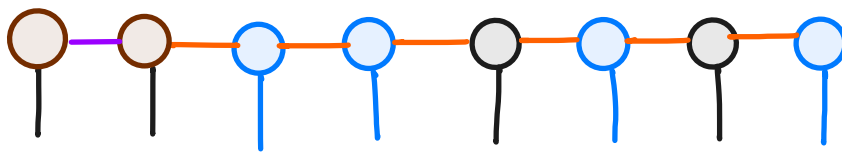


II : Apply trotter gate

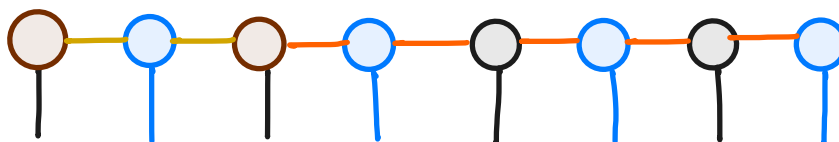
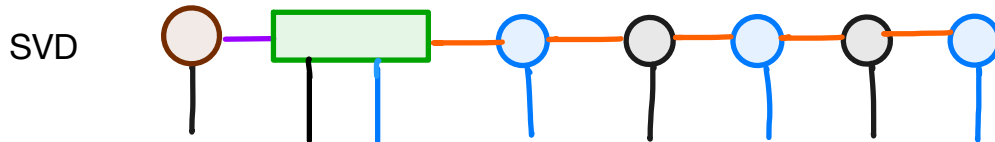




change back to MPS using SVD



III : Swap back the ancilla and physical index



Continue the method for next physical sites