Since Zf is equal to zero and also Z1(positive) and Z2(negative) have the same values of impedances so multiplying the positive sequence impedance i.e *Z_thpu* calculated in S2 with 2 and I_a is the same as calculated above i.e I_o_shctpu so the formula becomes:

Z_othpu=(3*V_t/I_o_shctpu)-(2*Z_thpu)

The value of terminal voltage is 1 per unit.

Z_othpu= 0.0025 + 0.0121i

Transformer T1 is zero grounded shown by subscript 0 but there is no change in its impedance so taking it from S2 denoted Z_T1pu and also the value of **shunt capacitance** is the same.

In positive sequence (S2) we did consider the seventh node because we had a voltage source there but in case of zero sequence there is no voltage source so node 7 will be eliminated and the Y-bus matrix will be of order 6*6. Following the same procedure for the calculation of the Y-bus matrix i.e