PRACTICAL 4

Find the characteristic impedance and the phase constant of a distortionless line

```
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// Given values
L = 0.25e-6; // H/m
C = 100e-12; // F/m
f = 600e6;   // Hz
// Characteristic impedance
Z0 = sqrt(L / C);
disp("The characteristic impedance, Z0 (ohms): " + string(Z0));
// Phase constant (beta)
beta = 2 * %pi * f * sqrt(L * C);
disp("The phase constant, beta (rad/m): " + string(beta));
```

OUTPUT:

"The characteristic impedance, Z0 (ohms): 50"

"The phase constant, beta (rad/m): 18.849556"