

PRACTICAL 5

Program to find the power dissipated of the lossy transmission line

```
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// Define values
Loss_1 = 0.2 * 10;
Loss_2 = 0.1 * 15;
R = 0.3;
Pin = 100e-3;
// Calculate Loss_j
Loss_j = 10 * log10(1 / (1 - abs(R)^2));
// Total loss
Loss_total = Loss_1 + Loss_2 + Loss_j;
// Output power calculation
Pout = Pin * 10^(-Loss_total / 10);

disp("Total Loss in dB: " + string(Loss_total));
disp("Power transmitted in mW: " + string(Pout * 1000));
```

OUTPUT:

"Total Loss in dB: 3.9095861"

"Power transmitted in mW: 40.648207"