Tutorial: 6. Radio Propagation and Free space loss.

- Line Of Sight propagation
- If the distance between the Tx & Rx increases, the signal strength decreases. **Free space loss**
- Propagation through obstacals.

  (More conductive parts reduces the signal strength)
- Propagation through Reflextion

  (Reflection by building)
- propagation through diffraction

  (Bending of Radio waves at the sharp Edges of the Mountain)

Free space loss (L_{FS}) $= 32.45 + 20 \times \log(D) + 20 \times \log(f)$

L_{FS} = Free space loss in dB.

f = frequency in MHz

D = Distance in Km (between the End Node & Gateway)