Question:

Ram stays in Kota and is planning to visit Kanpur. There are four trains till Mathura & 3 buses, from their 2 buses, 4 taxis and 3 jeeps available till Kanpur find the number of paths he can take if every vehicle follows different path till destination.

Answer:

Paths for Kota to Mathura: (4)*(3) = 12

Paths for Mathura to Kanpur: (2)*(4)*(3) = 24

Total number of paths that can be taken by ram = 12 + 24 = 36.