**Example:**

**Solve the following Equations using Gauss – Elimination method**

**x+y+z=3**

**2x+3y+z=6**

**x-y+z=1**

**Solution:**

**AX=B**

**=**

**[A, B] ~**

**[A, B] ~ R2 🡪 R2 – 2R1 & R3 🡪 R3 – R1**

**[A, B] ~ R3 🡪 R3 – R1**

**[A, B] ~ R3 🡪 R3 + 2R2**

**We get,**

**-2x=-2**

**-2y=-2**

**-2z=-2**

**The solution is, x=1, y=1, z=1**