**MP-1 HOME ASSIGNMENT-4**

1. A manufacturer of baby-dolls makes two types of dolls. Doll X and Doll Y. Processing of these two dolls is done on two machines, A and B. Doll X requires two hours on machine A and six hours on machine B. Doll Y requires five hours on machine A and also five hours on machine B. there are 16 hours of time available on machine A and thirty hours on machine B. The profit gained on both the dolls is same, i.e. one rupee per doll. What should be the daily production of each of the two dolls? Formulate but not solve the mathematical programming problem. Suggest the suitable algorithm to solve it.

Solve the following L.P.P by Gomory technique :

𝑀𝑎𝑥𝑖𝑚𝑖𝑧𝑒 𝑧=3𝑥2

𝑆𝑢𝑏𝑗𝑒𝑐𝑡 𝑡𝑜 3𝑥1+2𝑥2≤7

𝑥1−𝑥2 ≤−2

𝑥1,2≥0 𝑎𝑟𝑒 𝑖𝑛𝑡𝑒𝑔𝑒𝑟𝑠.

