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5(a) # Transportation Problem

The transportation problem is a special type of linear programming problem where the objective is to minimise the cost of distributing a product from a number of sources or origin to a number of destinations.

These problem require a special method of solution.

The origin of a transportation problem is the location from which shipment are despatched.

The destination of a transportation problem is the location to which shipments are transported.

The unit transportation cost is the cost of transporting one unit of the consignment from an origin to destination.

# TRANSPORTATION AND ASSIGNMENT

- The Transportation and assignment deal with assigning sources and jobs to destination and machines.
- The transportation are one of the linear programming problem.
- The transportation is to transport various amount of single homogeneous commodity. we are initially stored at various origins.
- In transportation number of sources and and the number of destination not need not be equal.
- In this the total supply and total demand are not equal.

- The assignment is to transport various amount of a single homogeneous
- The assignment which finds many allocation in allocation and scheduling.
- In assigning salesman to different regions vehicles and drives to different routes.
- Assignment originates from the classical problem where the objective is to assign a number of origins (Job) to the equal number of destination (Persons) at a minimum cast. (or maximum profit)
- Assignment is done one basis, the number of sources and the number of destinations are equal. The cost matrix must be a square matrix.