**Parameters 1:**

ii-1: Initial Inventory in week i;

si: Sales budget in week i;

*Derived Variables:*

Ap; Avg purchase price of an article;

vi: the value of inventory in week i; (vi = ii \* Ap);

**Decision:**

xi : intake in week i;

**Objective:**

Minimum inventory holding value

**Constraints:**

(Balancing Equation)