**Model:**

Parameters:

$$U\_{i}:Units of product i, where i=\left\{1,2,…,30\right\}$$

$$P\_{i}:Price of product i, where i=\{1,2,…,30\}$$

$$M:Maximum units of product in a shelf$$

Decision Variable:

$$X\_{i}:Shelf Number where product i is kept, where i=\left\{1,2,…,30\right\}$$

Objective:

$$Maximize:\sum\_{i}^{}P\_{i}, for i where X\_{i}\ne 0$$

Constraints:

1. $X\_{i}\in Integers$
2. $X\_{i}\geq 0$
3. $X\_{i}\leq 14$
4. $\sum\_{i}^{}U\_{i}\leq M, for i where X\_{i}=\{1,2,…,14\}$