Decision Variable: Ice cream shop, there are only two types of ice cream, vanilla and strawberry

X_1 = Ice-cream

X_1 = Vanilla ice-cream

X_2 = Strawberry ice-cream

Objective: Get the highest benefit by profit for vanilla ice cream is $2 and $3 for strawberry ice cream.

$2 X_1 + 3 X_2$

Constraint: To make the ice cream, the fresh milk is required. To make a box of vanilla ice cream requires 0.5 liter and strawberry ice cream requires 0.2 liter.

You daily order 10 liters of fresh milk.

$0.5 X_1 + 0.2 X_2 <= 10$ → eq. 1

Give a doll for each ice cream box. The number of dolls, that you can give to customers, is 30 dolls per day

$1 X_1 + 1 X_2 = 30$ → eq. 2

** Vanilla ice-cream, Strawberry ice-cream must more than 0**

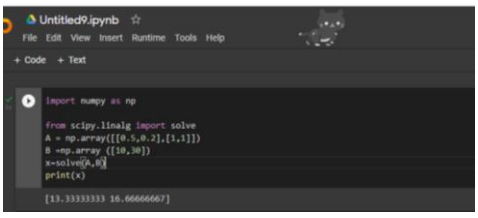
$X_1 >= 0, X_2 >= 0$

Then,

A is matrix of the number before X_1 and X_2 from eq. 1 and eq. 2

B is number of outcomes from eq. 1 and eq. 2

Then, solve equation.



After that find the maximum profit.