q1-e

October 14, 2019

0.1 Question 1- e

In [1]:
```
import numpy as np

        def cost_calculator(prices, input_matrix, quantities):
            '''
            Description:

            inputs:
                prices= vector of prices of the inputs
                quantities = vector of the desire quantities to produce
                input_matrix = matrix that specifiy the quantities of factors to produce one q
            output:
                total cost
            '''
            p_by_matrix = np.dot(input_matrix, prices)
            total_cost = np.dot(q, p_by_matrix)
            rv =print("Total Cost equal to "+str(total_cost)+"\n"+"The price for one " +"Road i
            return rv

        prod_matrix =[[1,0,0,0,1],[1,1,1,0,1],[0,2,0,3,0],[0,1,1,1,0]]
        p = [1,5,3,8,2]
        q = [1,1,1,1]

        cost_calculator(p,prod_matrix,q)
```

```
Total Cost equal to 64
The price for one Road is $3
The price for one Settlement is $11
The price for one City is $34
The price for one Dev. Card is $16
```