Homework 1:

- Derive the general formulation of the Google Ads example (slides 14-18, topic 1).

- Implement it in Pyomo and solve it for the following data. Upload the Jupyter Notebook.

Average revenue per user (€) (PCR*CTR):

Advertiser	Query 1:	Query 2:	Query 3:	Query 4:
Company A	1	0.75	5	2
Company B	0.5	0.5	2	3
Company C	0.5	3	1	0.5
Company D	2	1	3	1

Advertiser	Budget (€)
Company A	200
Company B	150
Company C	180
Company D	250

Query	Estimated # requests
Q1	150
Q2	90
Q3	80
Q4	120