CS 5110/6110 Program 4

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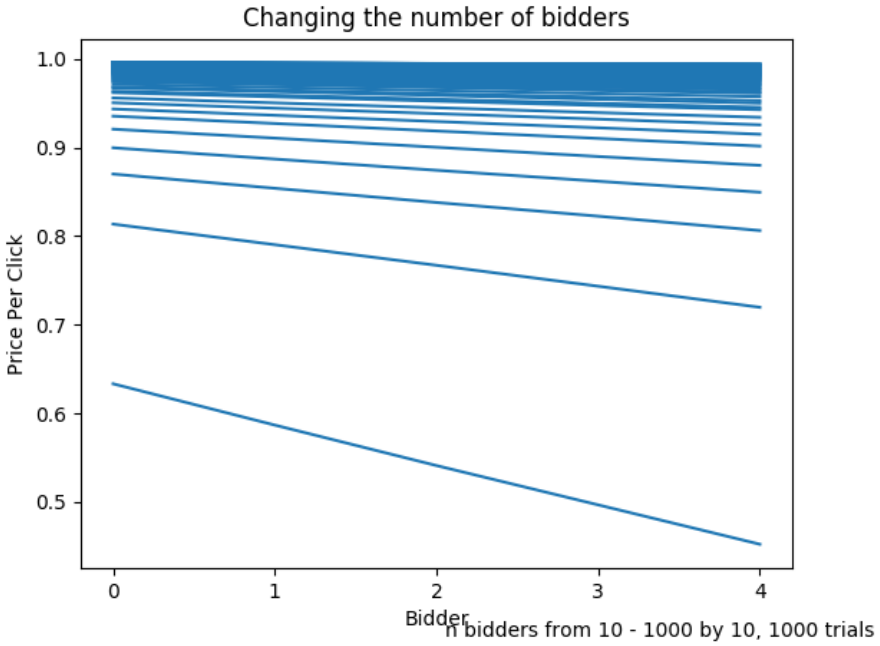
10 April 2020

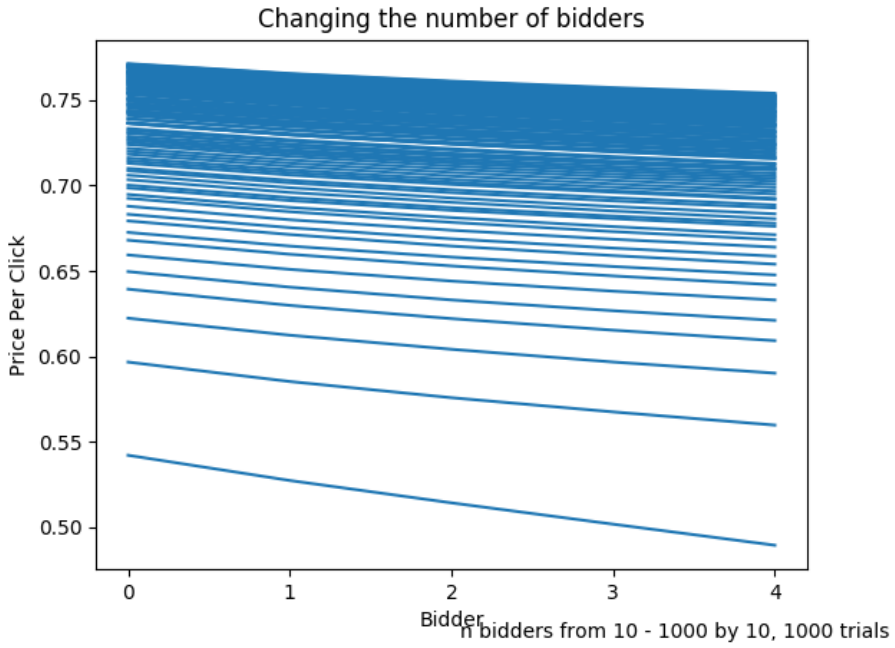
Changing Number of Bidders (Linearly Distributed Bids)

More bidders pushed the price higher



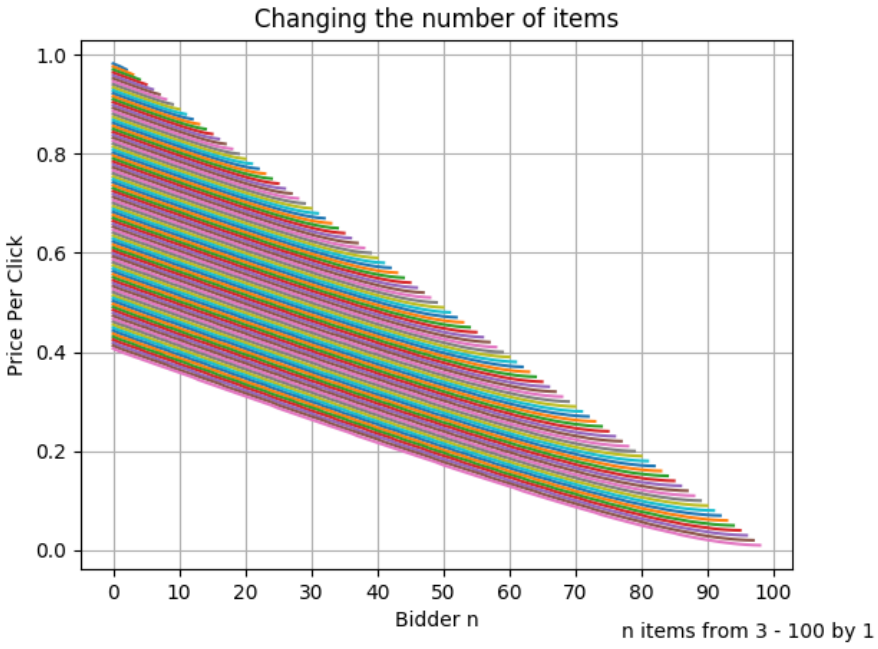
Changing Number of Bidders (Normally Distributed Bids)

More bidders pushed the price higher; however, the price final price per click does not end up being as high as with the linear distribution.



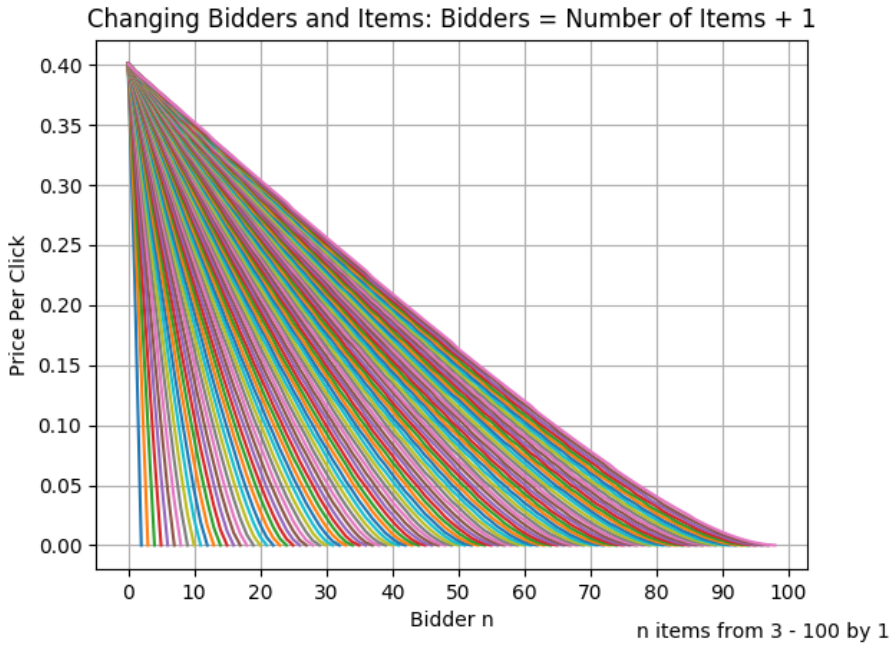
Changing the Number of Advertising Slots, Constant Number of Bidders

More slots pushed the price lower



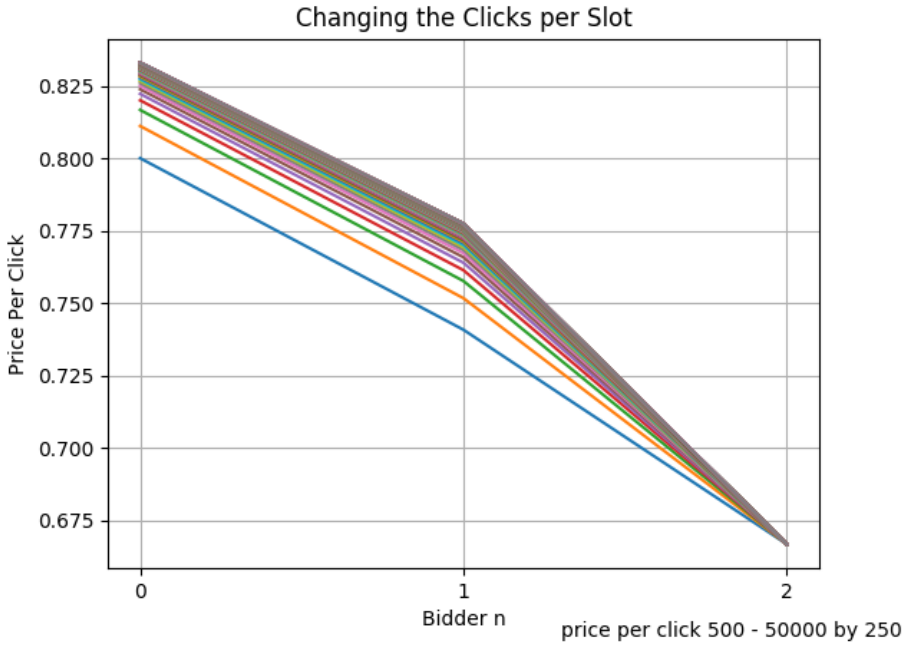
Changing the Number of Advertising Slots While Increasing Bidders

More items and bidders pushed the price higher for the i^{th} bidder : $0 \leq i < n$.



Changing the Number of Clicks per Slot

The price per click goes from *high* to *low*, where *high* goes from 500 to 50000 by 250, and $low = 100$. When the *low* remained constant and the *high* increased, the price per click increased for the i^{th} bidder : $0 \leq i < n$.



Changing the Number of Clicks per Slot

The price per click goes from $high$ to low, where $high$ goes from 500 to 50000 by 25, and $low = high - 400$. When the low remained a constant amount lower than the $high$, the price decreased for the i^{th} bidder : $0 \leq i < n$.

Changing the Number of Clicks per Slot

The price per click goes from *high* to *low*, where *high* goes from 500 to 50000 by 25, and $low = \frac{high}{5}$. When the *low* remained a proportional amount lower than the *high*, the price per click remained the same for the i^{th} bidder.