MWEM: Multiplicative Weights + Exponential Mechanism

Imagine: a quite large set **Q** of counting questions.

an initial guess **D** about the data distribution.

Let MWEM(**A**): repeat until happy …

   1. Use the exp mech to pick a **q** in **Q** "maximizing"

$$\textbf{score}(\textbf{A}, \textbf{q}) = | \textbf{q}(\textbf{A}) - \textbf{q}(\textbf{D}) |.$$

   2. Use the Lap mech to measure **q**(**A**) + noise.
   3. Update guess about distribution **D**, using MW.

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