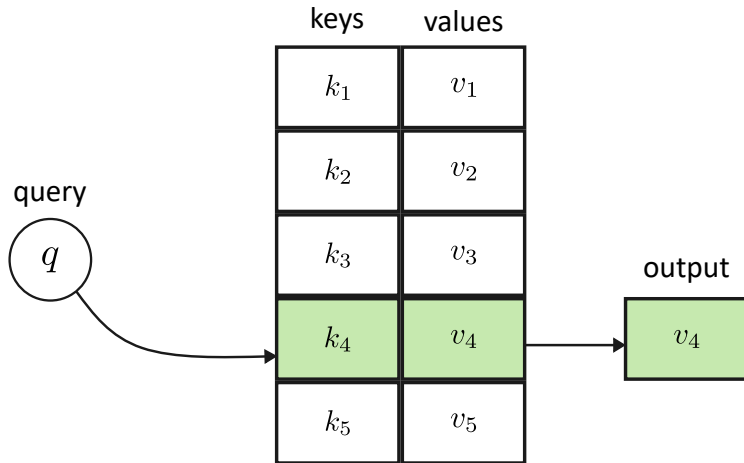


Transformers (Part 3)

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Hard Lookup

- ▶ In a database, there is a table where **keys** are mapped to **values**.
- ▶ A **query** matches one of the keys and returns the corresponding value.



Soft Lookup

- ▶ In attention, the query matches all keys softly, to a weight between 0 and 1.
- ▶ The values of the keys are multiplied by their respective weights and then summed.

