Cash Bank

Cash = (0.8)[Cash] + (0.2)[Bank]

Bank = (0.3)[Cash] + (0.7)[Bank]

River Bank

River = (0.9)[River] + (0.1)[Bank]

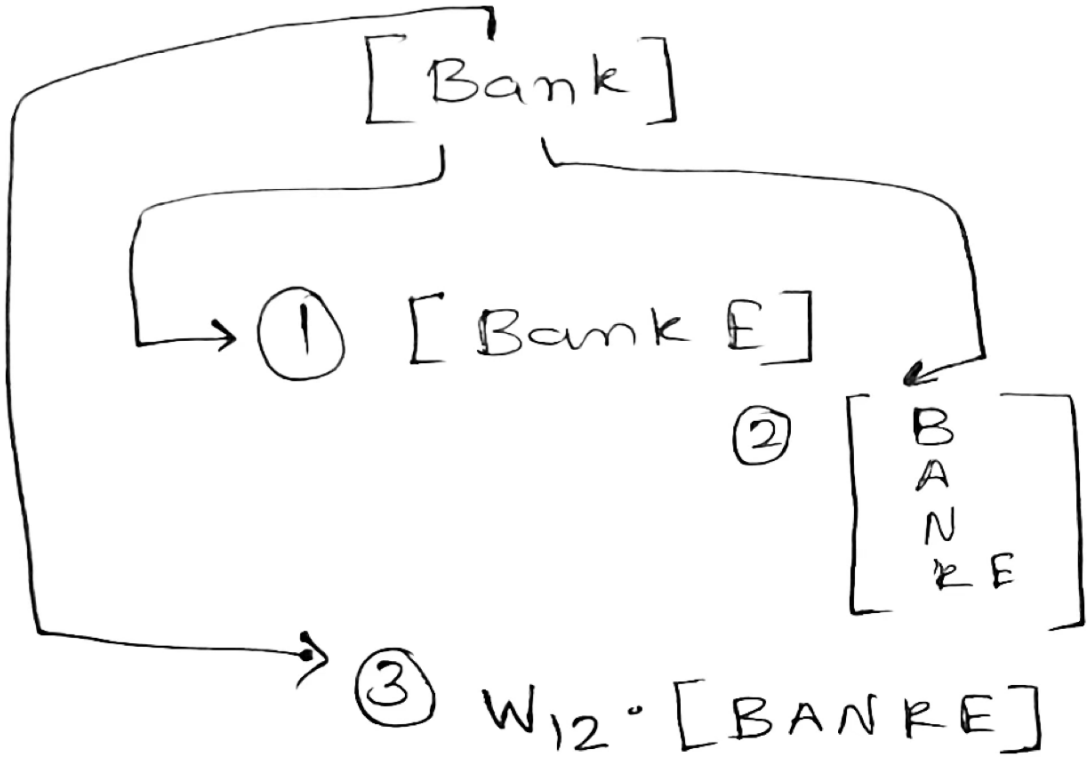
Bank = (0.05)[River] + (0.95)[Bank] .

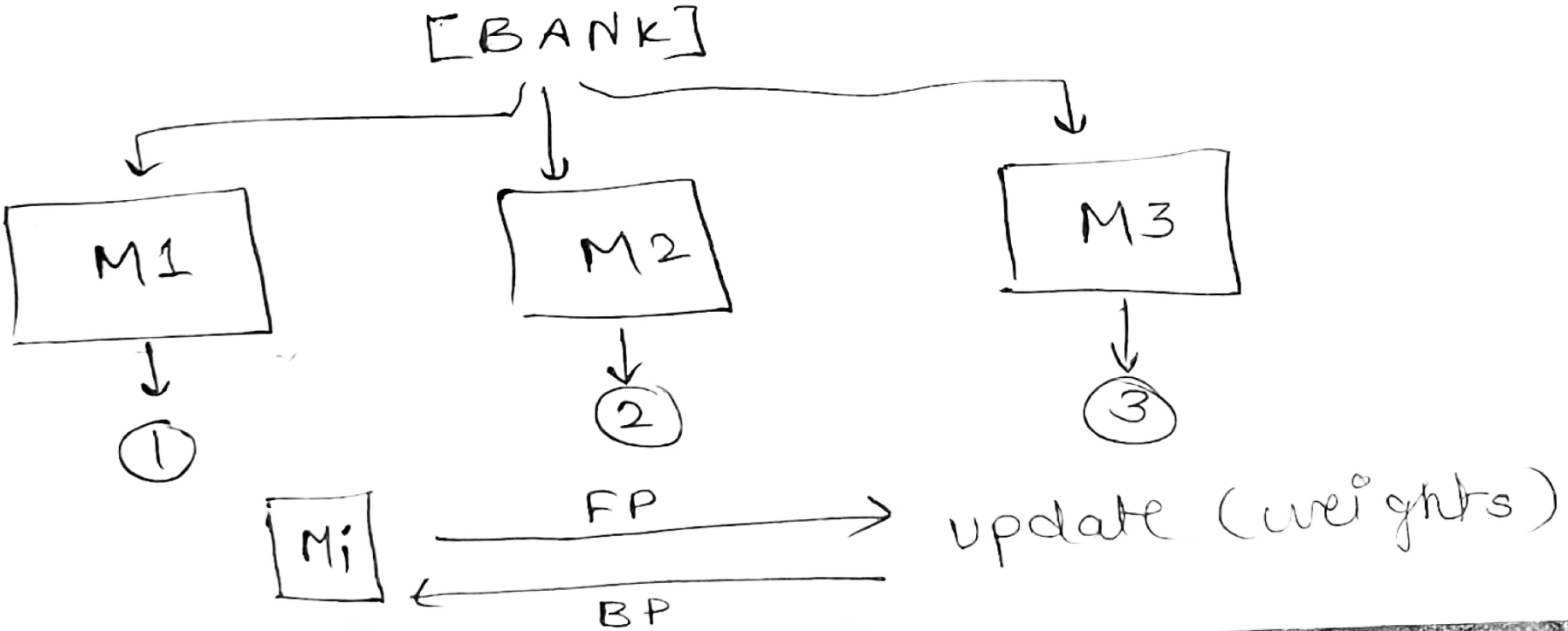
Similarity (dot product)

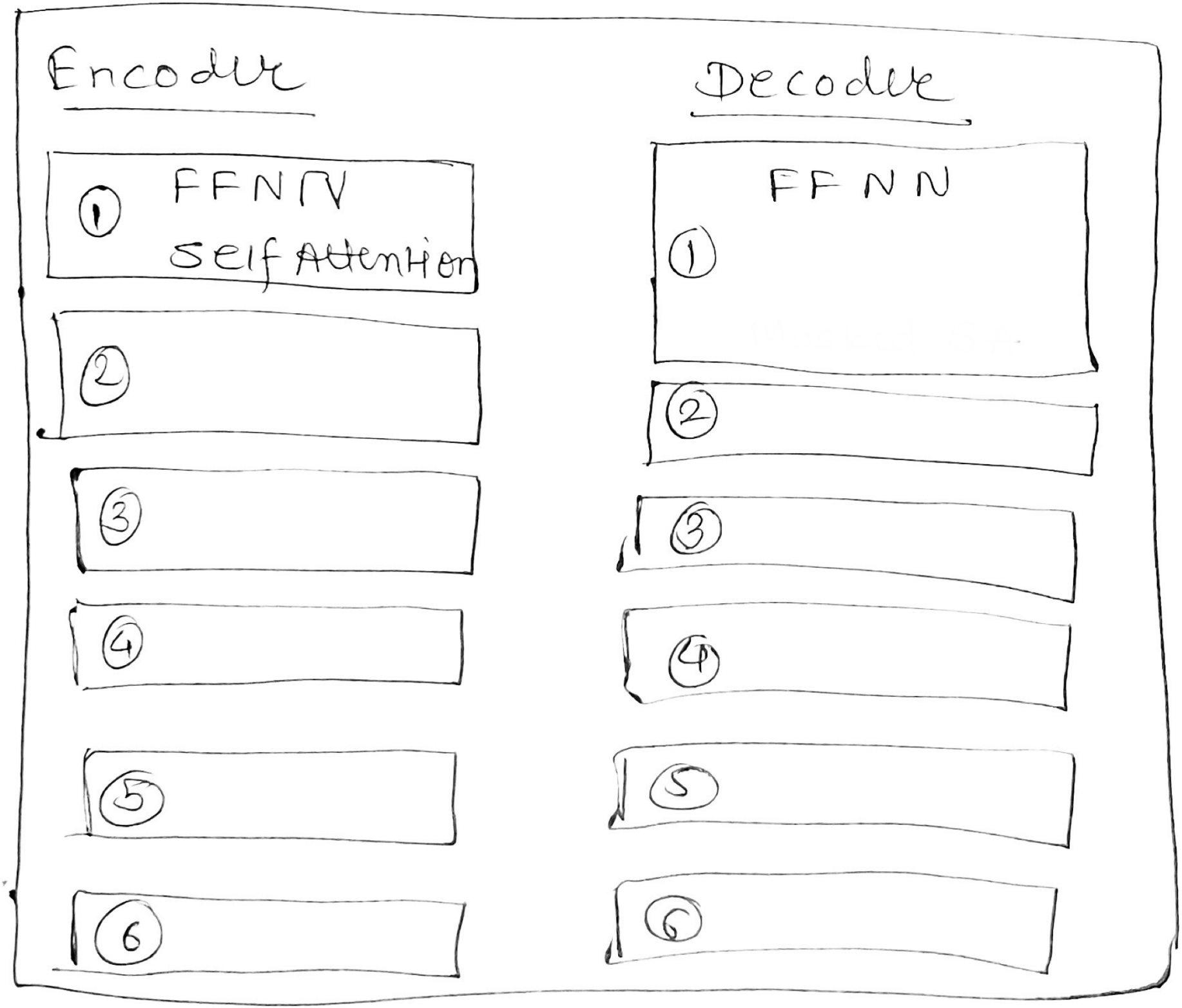
$$[\text{NBank}] = [(\bullet\,\text{BANK}) \cdot (\text{Cash})^T] * [\text{Cash}] + [(\bullet\,\text{BANK}) \cdot (\text{BANK})^T] * [\text{Bank}]$$

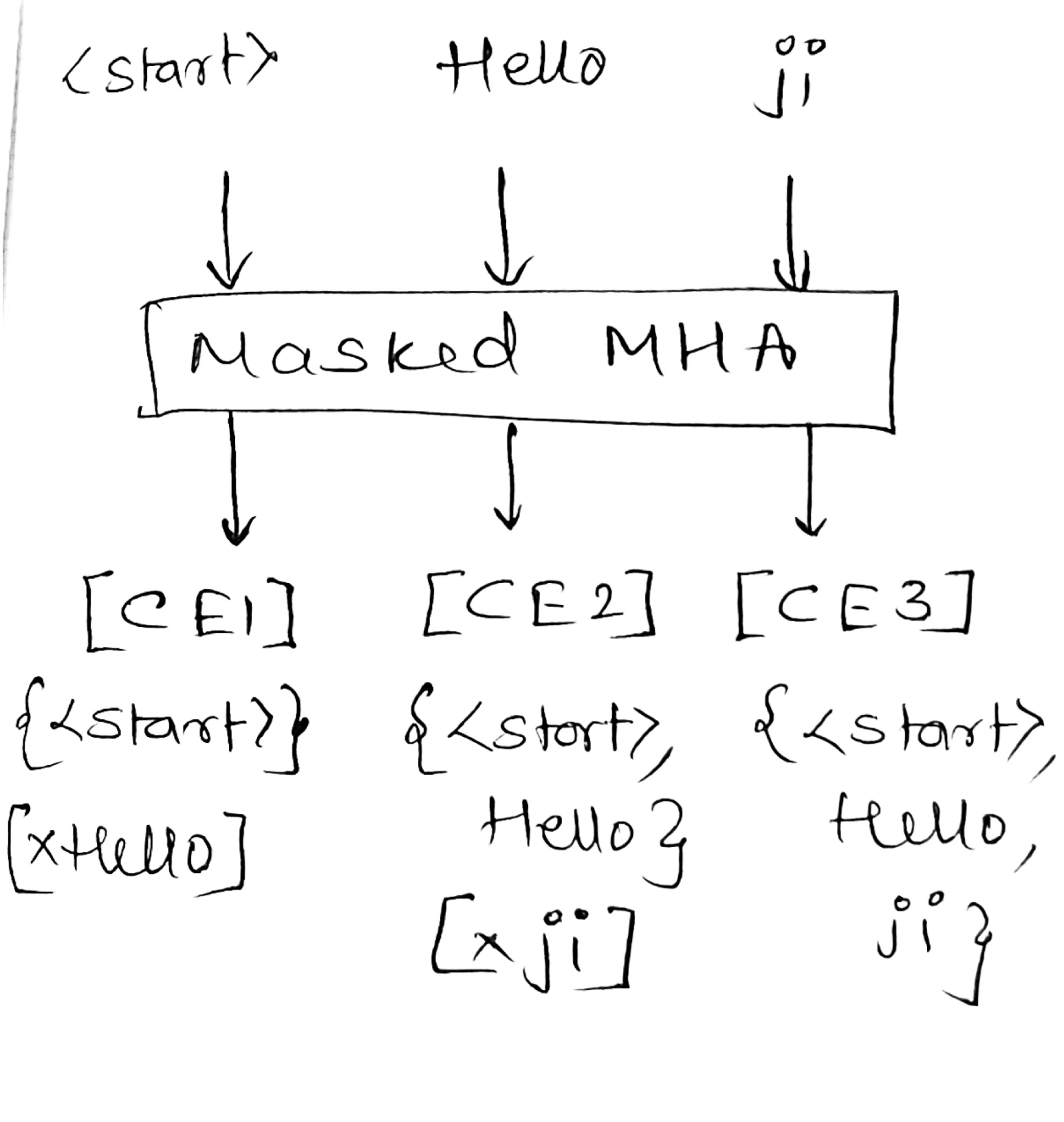
(R11) Embedding similarity (R12)

$$\Rightarrow \begin{matrix} R_{11} \\ R_{12} \end{matrix} \rightarrow [\text{Softmax}] \rightarrow \begin{matrix} (W_{11} \times [\text{Cash}]) \\ + \\ (W_{12} \times [\text{Bank}]) \end{matrix} \rightarrow [\text{NBank}]$$


[Bank]
① [Bank E]
② [BANKE]
③ $W_{12} \cdot$ [BANKE]


[BANK]
M1
M2
M3
①
②
③
Mi
FP
BP
update (weights)


Encoder
Decoder
① FFNN Self Attention
FFNN
①
②
②
③
③
④
④
⑤
⑤
⑥
⑥


<start>
Hello
ji
Masked MHA
[CE1]
[CE2]
[CE3]
{<start>}
{<start>, Hello}
{<start>, hello, ji}
[x hello]
[x ji]