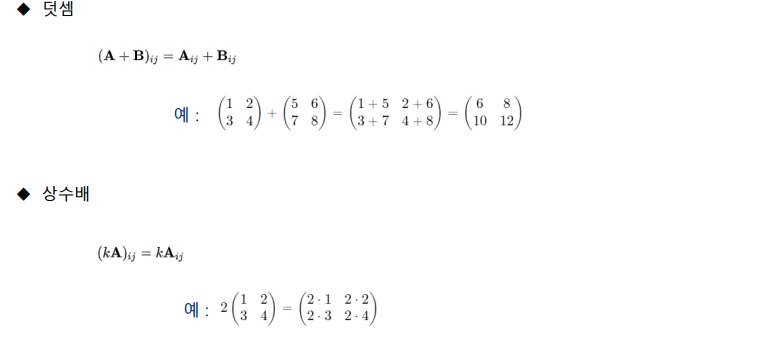
# <오전>

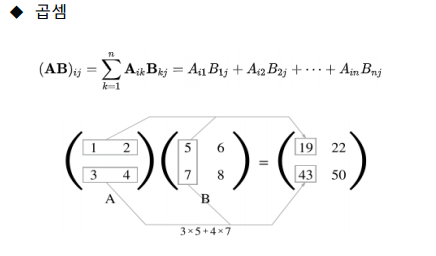
## 02. 인공신경망 기초

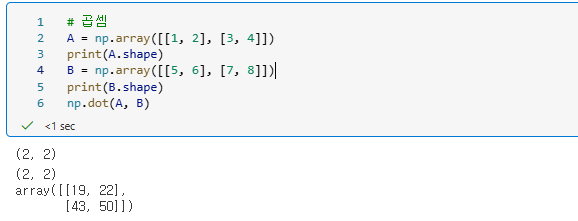
### 행렬 연산 연습

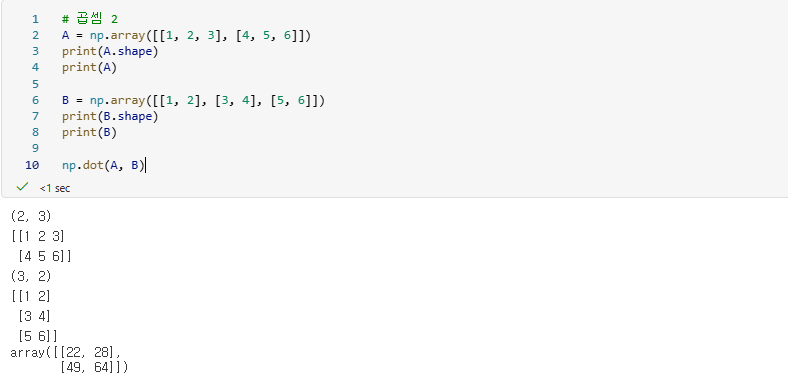


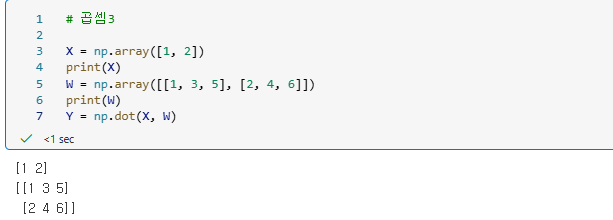
행렬의 연산

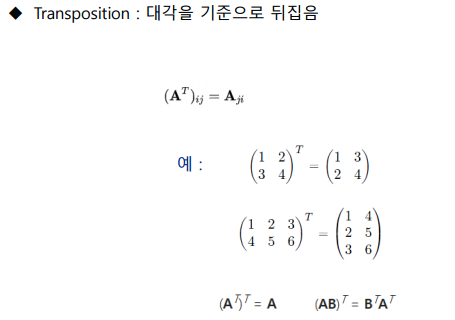


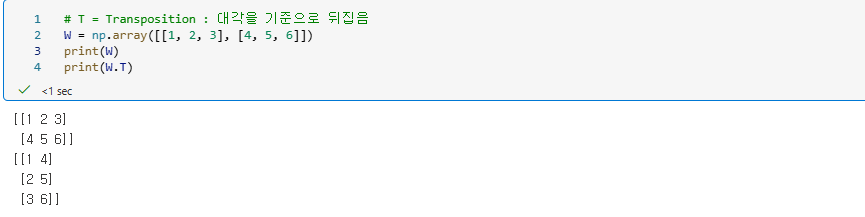




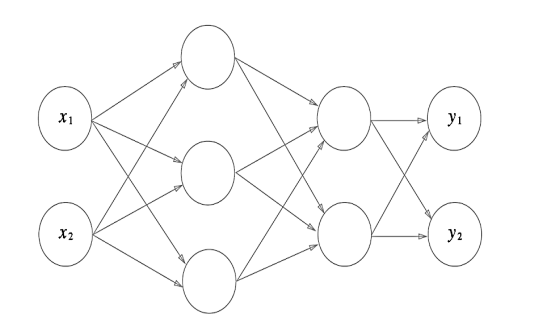




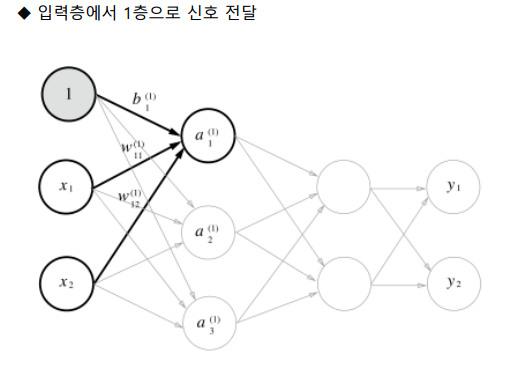


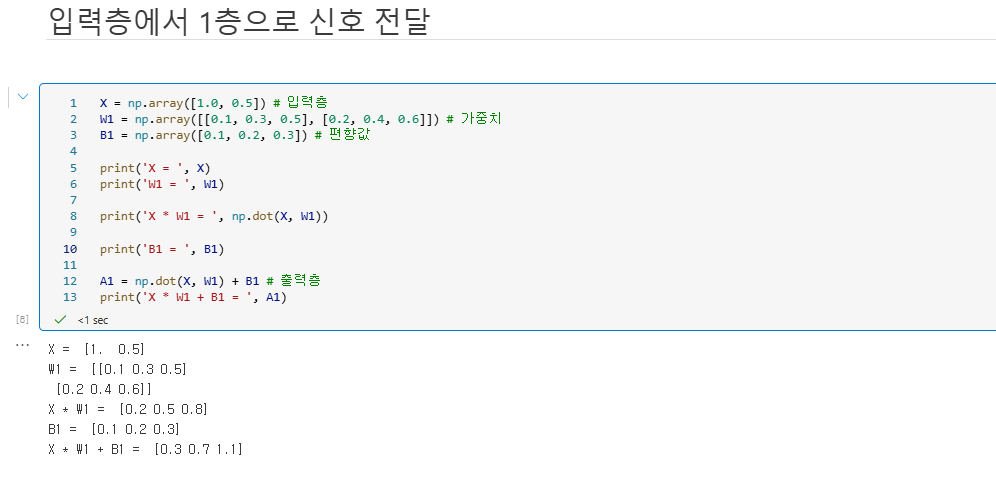


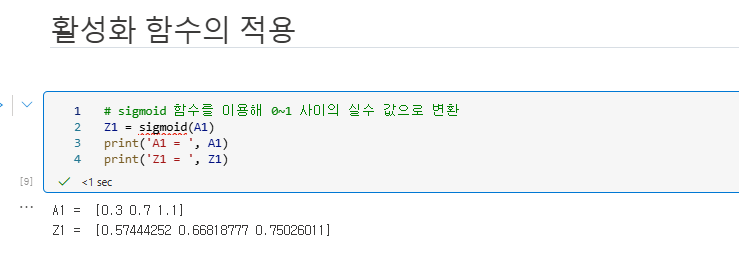
### 3층 신경망 구현

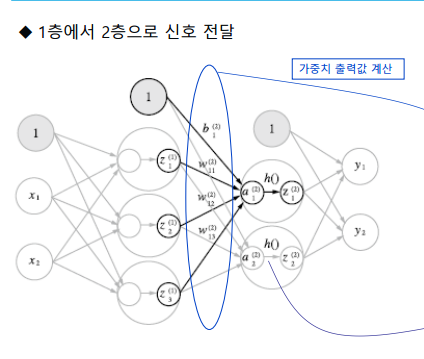




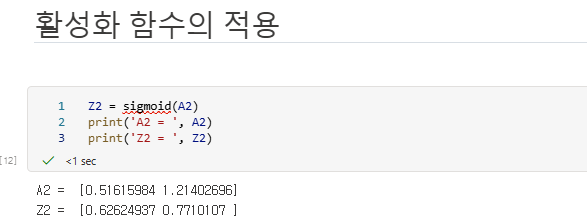


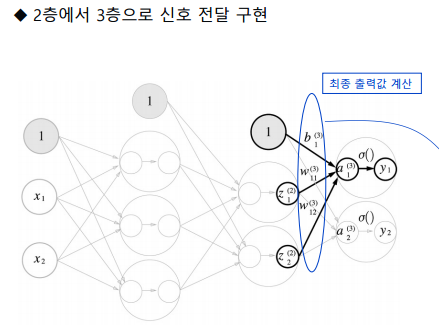


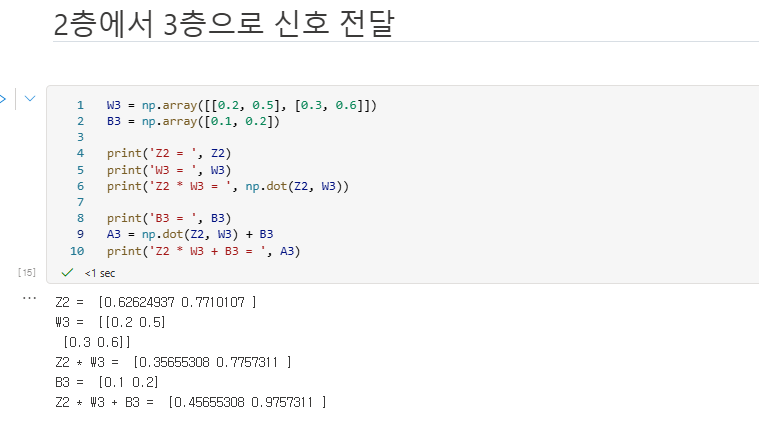


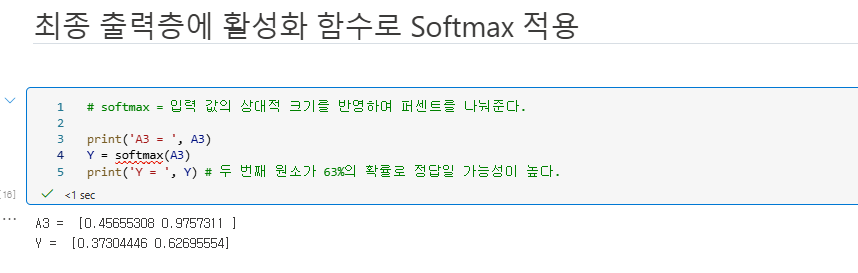






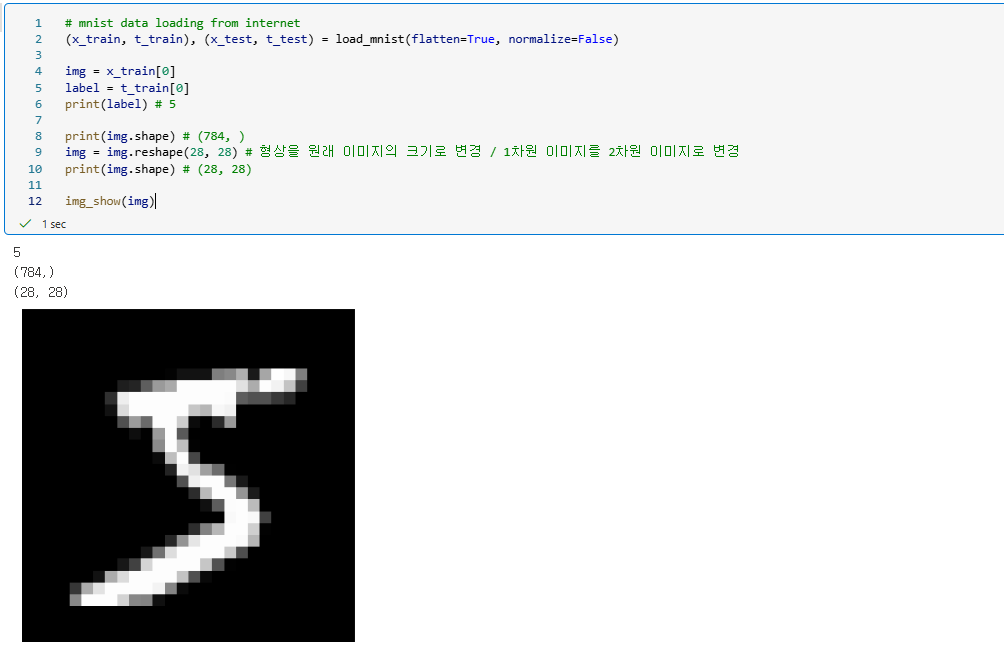






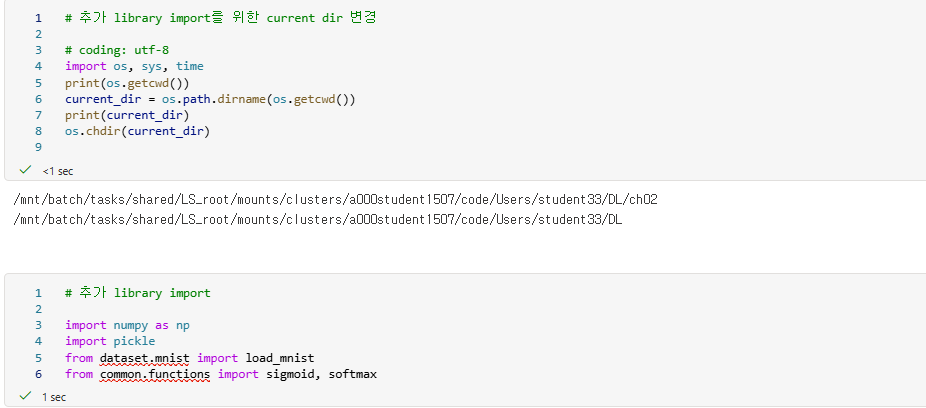
### MNIST 데이터 로드 후 화면 구현



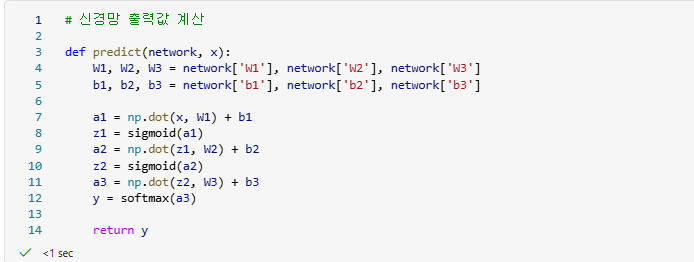


# <오후>

### MNIST 데이터로 숫자 인식하는 Python code 작성

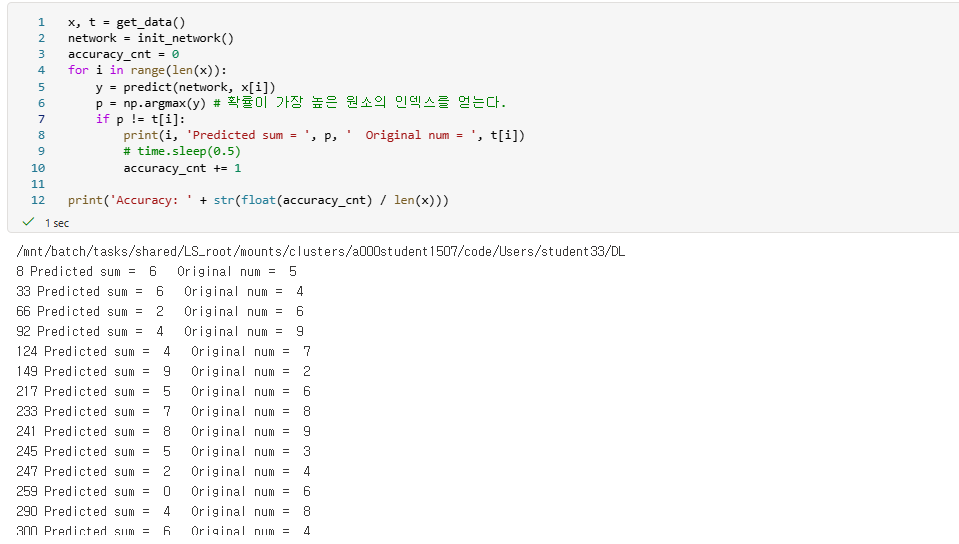




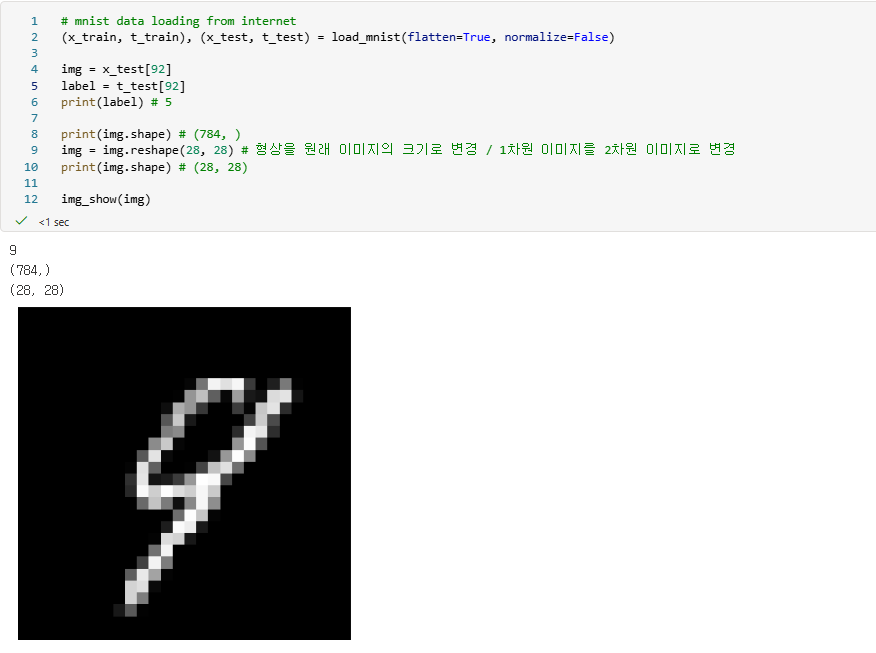




틀린 것들만 출력하게 바꿔보기



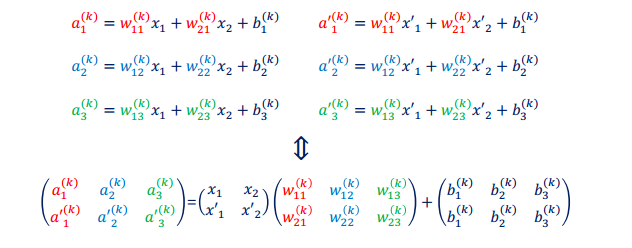
MNIST 데이터 화면 구현 한 곳에서 확인해 보기

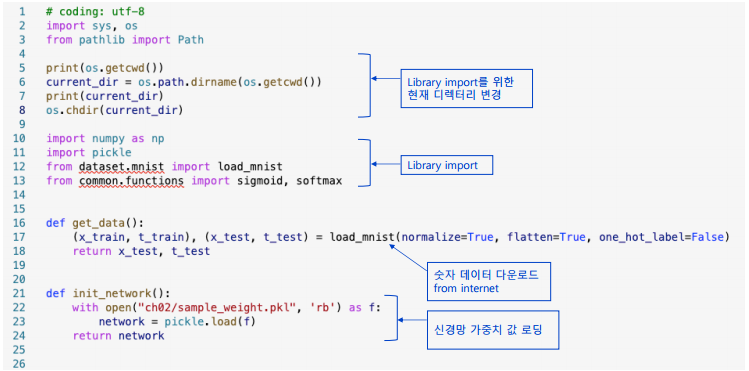


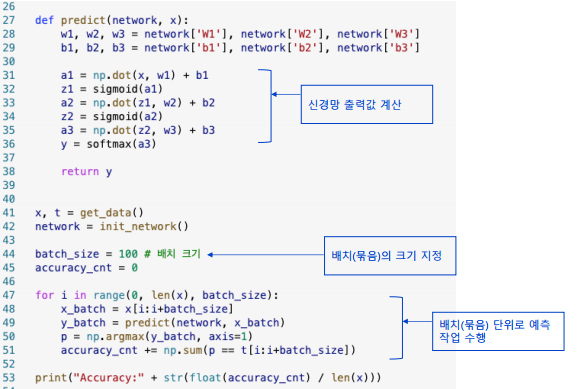
### MNIST 데이터 배치로 숫자인식 하는 Python code

숫자 데이터를 개별로 처리하면 I/O에서 병목현상이 발생함.

입력 데이터 묶음 처리를 통해 I/O에 주는 부하를 줄임.

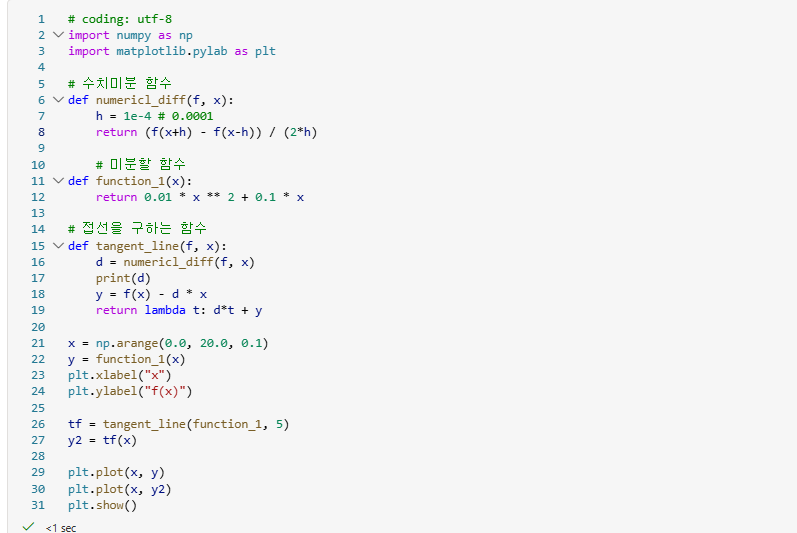


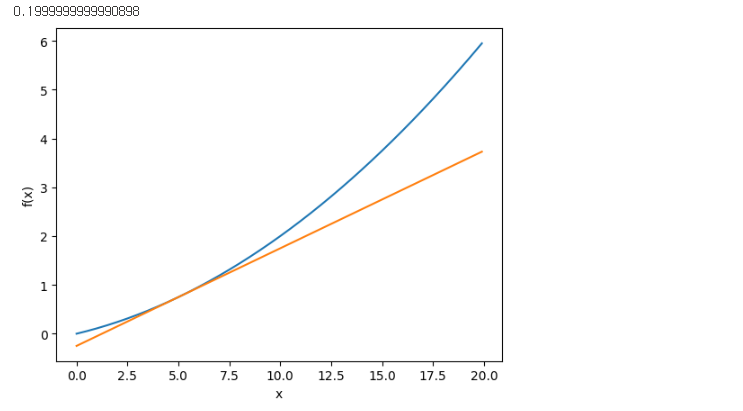




## 03. 신경망 학습

### y = 0.01x2 + 0.1x 의 x좌표 5에서 수치미분 접선 그리기





### f(x0, x1) = x02+x12의 각 좌표의 접선의 기울기를 2차원 평면에 표현하기

