Why do we use 0.5 as threshold of prediction in ADALINE Algorithm?

```
def predict(self, X):
    """단위 계단 함수를 사용하여 클래스 레이블을 반환합니다"""
    return np.where(self.activation(self.net_input(X))
                    >= 0.5, 1, 0)
```

In Adaline algorithm, $W^Tx+b \Rightarrow y=z \Rightarrow \hat{y}$, so with respect to prediction, ADALINE is same with Perceptron.

So to get prediction, we need threshold to calculate prediction value.

In case of $y=\{0,1\}$, usually use 0.5 as a middle value.

But in case of $y=\{-1,1\}$, use Zero as a middle value.

⇒ 뭔 얘기냐... 그냥 y class value에 따라 middle value 정하는 것.