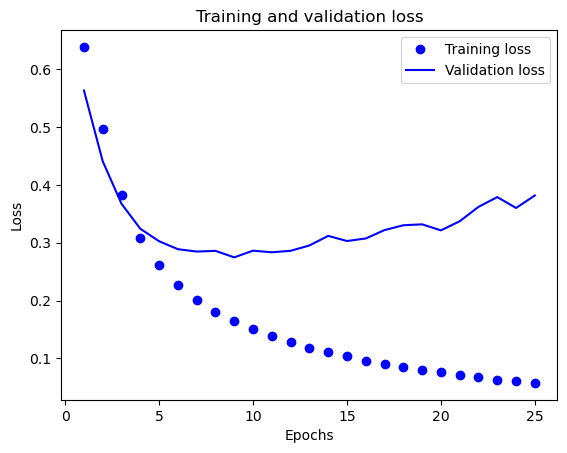
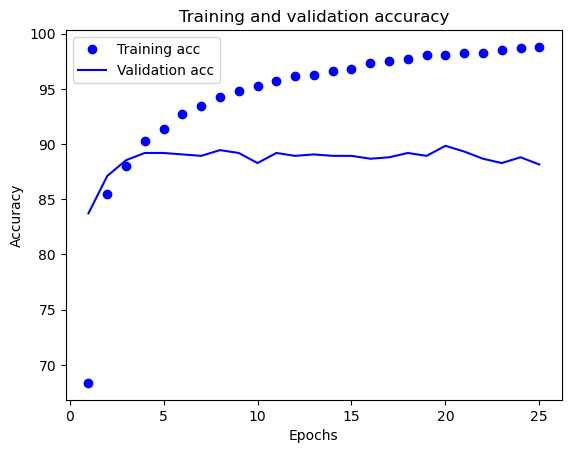
Original Result:

1. Training loss and Validation loss.



2. Training and validation accuracy.

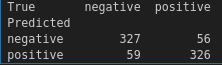


3. Test loss and accuracy.

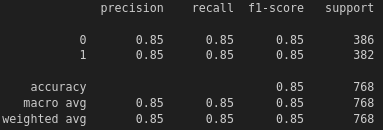
Test loss: 0.469

Test Accuracy: 85.03

4. confusion\_matrix

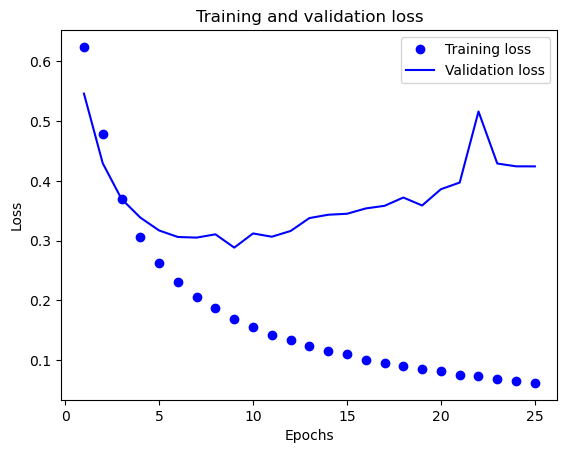


5. classification report



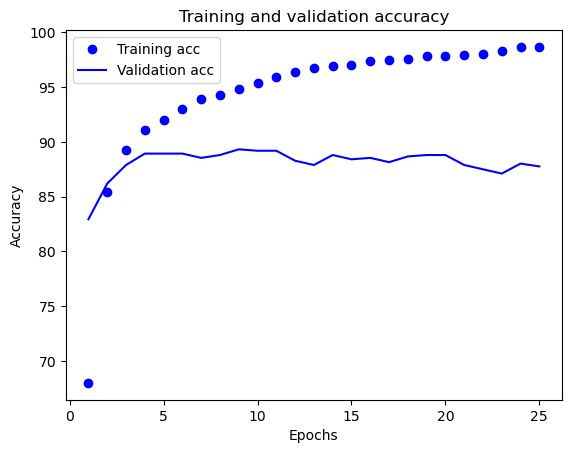
6. prediction result: this is a pretty awesome book -> positive

Task 1-1: update one-hot to term-frequency **only**



1. training loss and validation loss

2. Training and validation accuracy.

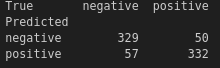


3. Test loss and accuracy.

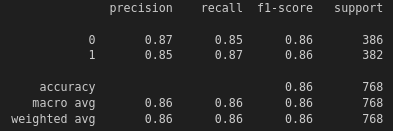
Test loss: 0.482

Test Accuracy: 86.07

4. confusion\_matrix



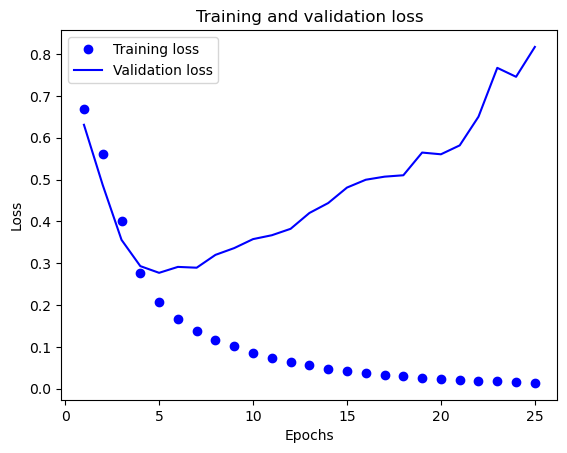
5. classification report



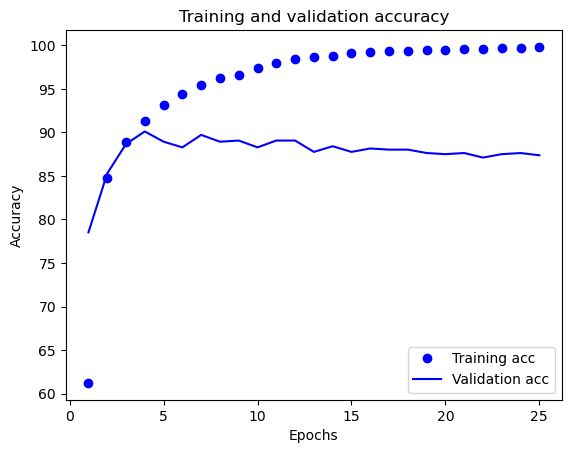
6. prediction result: this is a pretty awesome book -> **positive**

Task 1-2: add 1 additional hidden layer **only(equal dim)**

1. training loss and validation loss



2. Training and validation accuracy.

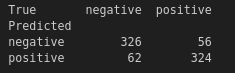


3. Test loss and accuracy.

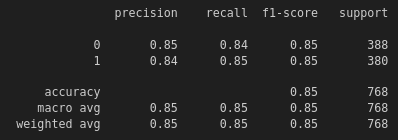
Test loss: 0.887

Test Accuracy: 84.64

4. confusion\_matrix



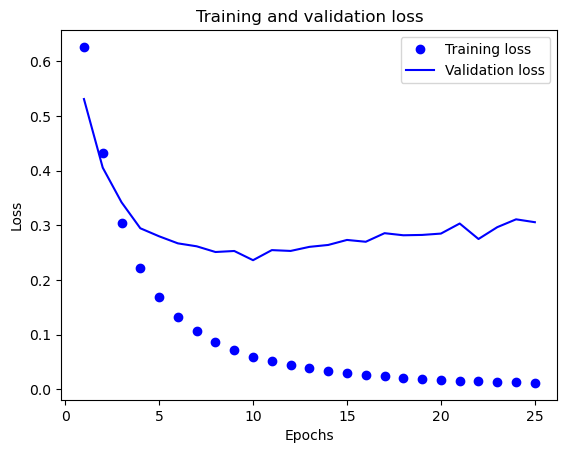
5. classification report



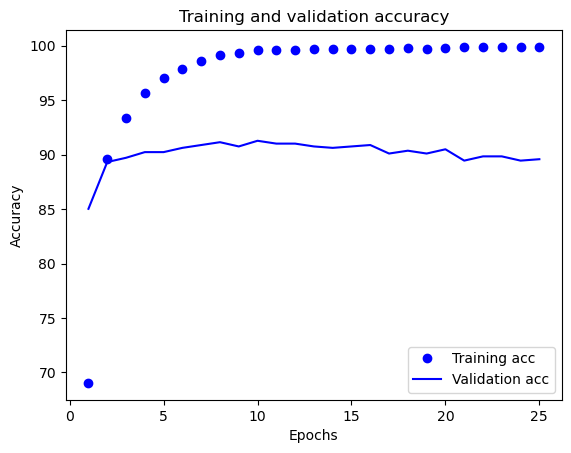
6. prediction result: this is a pretty awesome book → **positive**

Task 1-3: change the frequency cutoff to 0 **only**

1. training loss and validation loss



2. Training and validation accuracy.

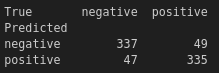


3. Test loss and accuracy.

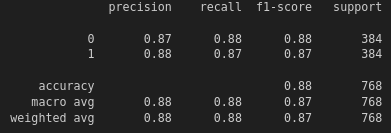
Test loss: 0.314

Test Accuracy: 87.50

4. confusion\_matrix



5. classification report



6. prediction result: this is a pretty awesome book →**positive**

Task 1-4: find **best combination** among of above approaches.

1. training loss and validation loss

2. Training and validation accuracy.

3. Test loss and accuracy.

Test loss:

Test Accuracy:

4. confusion\_matrix

5. classification report

6. prediction result: this is a pretty awesome book →

Task 2-1:

1. training loss and validation loss

2. Training and validation accuracy.

3. Test loss and accuracy.

Test loss:

Test Accuracy:

4. confusion\_matrix

5. classification report

6. prediction result: this is a pretty awesome book →