LAB Logbook

Lab 1

**Task:**

1. Create a vector using np.arange.



A screenshot of a computer

Description automatically generatedDetermine the number of the vector elements using the following method: Take the last two digits from your SID. It should be from 00 to 99. If this number is 10 or more, it becomes the required number of the vector elements. If it is less than 10, add 100 to your number.

For example, if your SID is 2287467, and the last two digits are 67, which is greater than 10. The required number is 67. If your SID is 2287407, and the last two digits are 07, which is less than 10. The required number is 107.

Then,

1. Change matrix a to 2-d array with 1 row. Print the array. You should have the two sets of brackets for a 2-d array with one row.
2. Save it in another array. Print the array.
3. Check the shape attribute value.
4. Add the code and result to your Lab Logbook

A screenshot of a chat

Description automatically generatedLab 2

1. Determine a number (n) equal to the last digit of your SID. If the last digit of your SID is '0', then use 10.
2. Group by "relationship" and "hours-per-week".
3. Reduce all "hours-per-week" column values ​​in the original DataFrame by subtracting the value 'n'. Use a function.
4. Group by "relationship" and reduced "hours-per-week".
5. Add the code and result to your Lab Logbook.

Lab 3

A screen shot of a computer

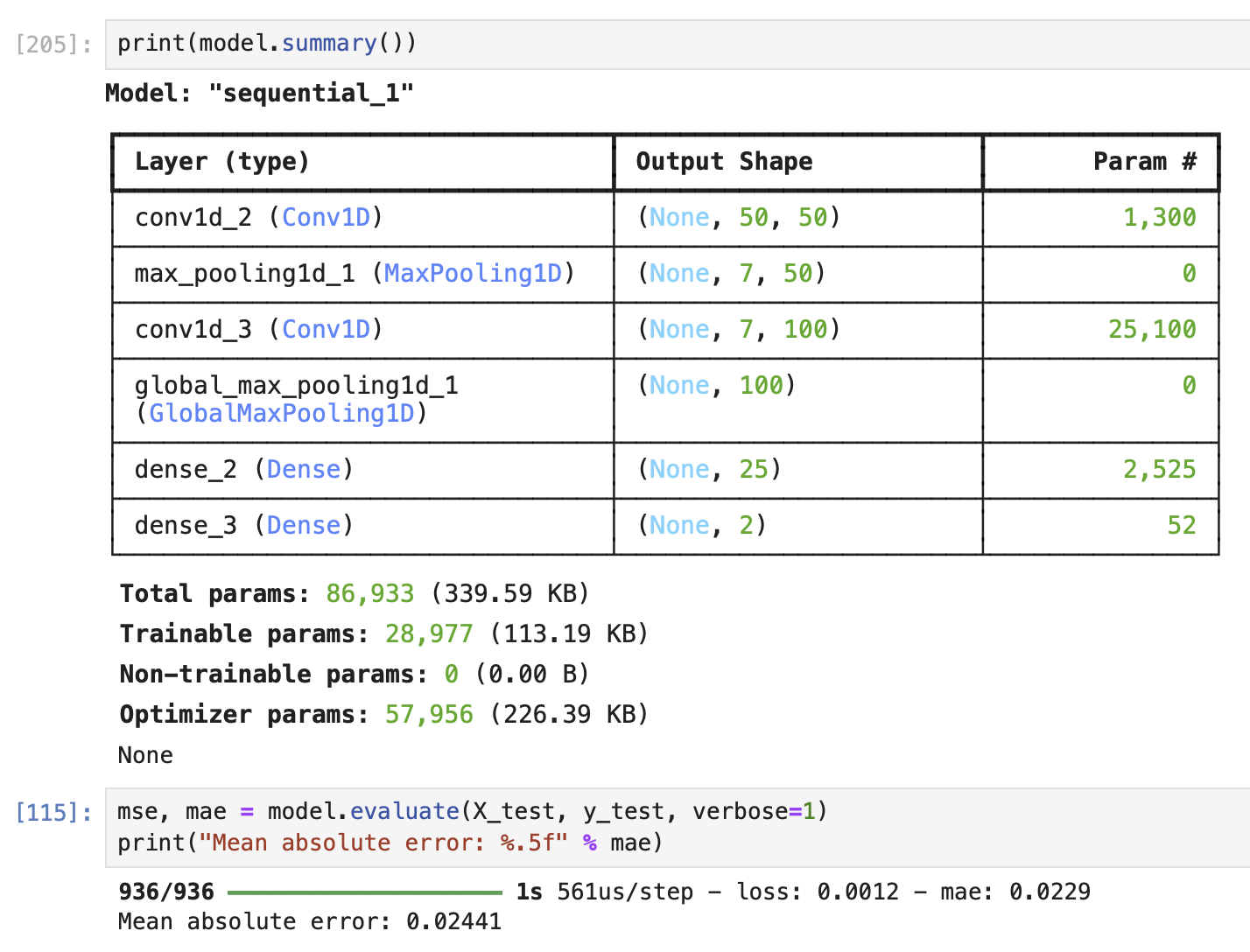
Description automatically generated

Lab 4

A screenshot of a computer

Description automatically generated

Lab 5



Lab 6

Lab 7

Lab 8

Lab 9

Lab 10

Lab 11

Lab 12