

Câu 1:

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... Classification Report:
              precision    recall  f1-score   support

     0           0.00         1.00         0.00         0
     1           0.88         0.61         0.72       1249
     2           0.78         0.10         0.18         70
     3           0.93         0.89         0.91      3137
     4           1.00         0.00         0.00         13
     5           1.00         0.00         0.00         94
     6           0.75         0.62         0.68      4148
     7           1.00         0.24         0.39         33
     8           0.90         0.82         0.86     4074
     9           1.00         0.00         0.00         40
    10           0.99         1.00         0.99    447384
    11           1.00         0.00         0.00         84
    12           0.85         0.83         0.84     3404
    13           0.76         0.69         0.73     3391
    14           0.83         0.85         0.84     7556
    15           1.00         0.00         0.00         65
    16           0.80         0.71         0.75     1461

 accuracy              0.98    476203
 macro avg           0.85    0.49    0.46    476203
 weighted avg        0.98    0.98    0.98    476203
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Câu 2:

	precision	recall	f1-score	support
1	1.00	0.00	0.00	551
2	0.00	0.00	0.00	114
3	1.00	0.00	0.00	1128
4	0.58	0.01	0.02	4832
5	0.00	0.00	0.00	1930
6	1.00	0.00	0.00	309
7	0.00	0.00	0.00	1474
8	0.00	0.00	0.00	715
9	0.00	0.00	0.00	1898
10	1.00	0.00	0.00	68
11	1.00	0.00	0.00	427
12	1.00	0.00	0.00	13
13	1.00	0.00	0.00	27
14	1.00	0.00	0.00	4354
15	1.00	0.00	0.00	190
16	0.86	0.80	0.83	128574
17	0.00	0.00	0.00	1639
18	1.00	0.00	0.00	6
19	0.01	0.26	0.03	1582
accuracy			0.69	149831
macro avg	0.60	0.06	0.05	149831
weighted avg	0.80	0.69	0.71	149831

Câu 3:

Tên model sử dụng : Phobert-base

Link tải : [https://huggingface.co/docs/transformers/v4.46.0/en/model\\_doc/phobert#overview](https://huggingface.co/docs/transformers/v4.46.0/en/model_doc/phobert#overview)

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B-SYMPTOM_AND_DISEASE	0.00	0.00	0.00	1128
B-LOCATION	0.64	0.13	0.21	4354
B-ORGANIZATION	0.00	0.00	0.00	715
B-NAME	0.00	0.00	0.00	309
I-TRANSPORTATION	0.00	0.00	0.00	68
I-ORGANIZATION	0.83	0.03	0.06	1898
B-JOB	0.00	0.00	0.00	169
I-JOB	0.00	0.00	0.00	114
O	0.89	0.99	0.94	128574
I-DATE	0.71	0.67	0.69	1639
B-AGE	0.00	0.00	0.00	551
B-TRANSPORTATION	0.00	0.00	0.00	190
B-PATIENT_ID	0.00	0.00	0.00	1930
I-PATIENT_ID	0.00	0.00	0.00	27
I-SYMPTOM_AND_DISEASE	0.00	0.00	0.00	1474
B-DATE	1.00	0.06	0.12	1582
I-LOCATION	0.52	0.50	0.51	4832
B-GENDER	0.00	0.00	0.00	427
I-NAME	0.00	0.00	0.00	13
I-AGE	0.00	0.00	0.00	6
accuracy			0.87	150000
macro avg	0.23	0.12	0.13	150000
weighted avg	0.83	0.87	0.83	150000