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Lớp thứ 4 tiết 123

# BÁO CÁO BÀI TẬP LAB 7: *Printing The Results*

# 1. Code python

#XXXXXXXXXXXXXXXXXXXXXXXXX COPY LAB6 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

filenames **=** **[**"Beagle\_01141.jpg"**,** "Beagle\_01125.jpg"**,** "skunk\_029.jpg" **]**

pet\_labels **=** **[**"beagle"**,** "beagle"**,** "skunk"**]**

classifier\_labels **=** **[**"walker hound, walker foxhound"**,** "beagle"**,**

"skunk, polecat, wood pussy"**]**

pet\_label\_is\_dog **=** **[**1**,** 1**,** 0**]**

classifier\_label\_is\_dog **=** **[**1**,** 1**,** 0**]**

# tao mot bien result\_dic

results\_dic **=** dict**()**

# so sanh trung khop thi gan

**for** idx **in** range **(**0**,** len**(**filenames**),** 1**):**

# neu chua co trong result\_dic thi them vao result\_dic

**if** filenames**[**idx**]** **not** **in** results\_dic**:**

results\_dic**[**filenames**[**idx**]]** **=** **[** pet\_labels**[**idx**],** classifier\_labels**[**idx**]** **]**

found **=** classifier\_labels**[**idx**].**find**(**pet\_labels**[**idx**])**

#lay cac nhan cua bo phan loai tim trong pet\_labels neu co thi dem 1 nguoc lai giu nguyen

**if** found **>=** 0**:**

results\_dic**[**filenames**[**idx**]]** **+=** **[** 1 **]**

**else:**

results\_dic**[**filenames**[**idx**]]** **+=** **[** 0 **]**

#neu ket qua trug khop nhan pet và phan loai nhan pet

#in ra ket qua " pet\_label\_is\_dog=1"

#in ra ket qua " classifier\_label\_is\_dog=1" nguoc lai bang 0

**for** idx **in** range **(**0**,** len**(**filenames**),** 1**):**

results\_dic**[**filenames**[**idx**]].**append**(**pet\_label\_is\_dog**[**idx**])**

results\_dic**[**filenames**[**idx**]].**append**(**classifier\_label\_is\_dog**[**idx**])**

**for** key **in** results\_dic**:**

**print(**"\nFilename="**,** key**,** "\npet\_image Label="**,** results\_dic**[**key**][**0**],**

"\nClassifier Label="**,** results\_dic**[**key**][**1**],** "\nmatch="**,**results\_dic**[**key**][**2**],**

"\nImage is dog="**,** results\_dic**[**key**][**3**],**"\nClassifier is dog="**,** results\_dic**[**key**][**4**])**

#tao result\_stats\_dic

results\_stats\_dic **=** dict**()**

#Khoi tao cac gia tri

results\_stats\_dic**[**'n\_dogs\_img'**]** **=** 0

results\_stats\_dic**[**'n\_match'**]** **=** 0

results\_stats\_dic**[**'n\_correct\_dogs'**]** **=** 0

results\_stats\_dic**[**'n\_correct\_notdogs'**]** **=** 0

results\_stats\_dic**[**'n\_correct\_breed'**]** **=** 0

# tinh tong so luong

results\_stats\_dic**[**'n\_images'**]** **=** len**(**results\_dic**)**

**for** key **in** results\_dic**:**

**if** results\_dic**[**key**][**2**]** **==** 1**:**

results\_stats\_dic**[**'n\_match'**]** **+=** 1

**pass**

**if** results\_dic**[**key**][**3**]** **==** 1**:**

results\_stats\_dic**[**'n\_dogs\_img'**]** **+=** 1

# 

**if** results\_dic**[**key**][**4**]** **==** 1**:**

results\_stats\_dic**[**'n\_correct\_dogs'**]** **+=** 1

**else:**

**pass**

**pass**

# tinh so buc anh khong phai anh cho

results\_stats\_dic**[**'n\_notdogs\_img'**]** **=** **(**results\_stats\_dic**[**'n\_images'**]** **-** results\_stats\_dic**[**'n\_dogs\_img'**])**

results\_stats\_dic**[**'n\_correct\_notdogs'**]** **=** **(**results\_stats\_dic**[**'n\_dogs\_img'**]** **-** results\_stats\_dic**[**'n\_correct\_dogs'**])**

#ti le phan tram trung và khong trung

results\_stats\_dic**[**'pct\_match'**]** **=** 0.0

results\_stats\_dic**[**'pct\_correct\_dogs'**]** **=** 0.0

results\_stats\_dic**[**'pct\_correct\_notdogs'**]** **=** 0.0

results\_stats\_dic**[**'pct\_correct\_breed'**]** **=** 0.0

# phan tram hinh cho trung khop voi nhan cho chinh xac

results\_stats\_dic**[**'pct\_correct\_dogs'**]** **=** **(**results\_stats\_dic**[**'n\_correct\_dogs'**]** **/**results\_stats\_dic**[**'n\_dogs\_img'**])\***100.0

#phan tram hinh cho khong trung khop voi nhan cho

**if** results\_stats\_dic**[**'n\_notdogs\_img'**]** **>** 0**:**

results\_stats\_dic**[**'pct\_correct\_notdogs'**]** **=** **(**results\_stats\_dic**[**'n\_correct\_notdogs'**]** **/**results\_stats\_dic**[**'n\_notdogs\_img'**])\***100.0

**else:**

results\_stats\_dic**[**'pct\_correct\_notdogs'**]** **=** 0.0

#pham tran trung khop chinh xac

results\_stats\_dic**[**'pct\_match'**]** **=** **(**results\_stats\_dic**[**'n\_match'**]** **/**results\_stats\_dic**[**'n\_images'**])\***100.0

**print(**"\nNumber of image="**,**results\_stats\_dic**[**'n\_images'**]** **,**"\nNumber of match="**,**results\_stats\_dic**[**'n\_match'**]** **,**

"\nNumber of dog="**,**results\_stats\_dic**[**'n\_dogs\_img'**],**

"\nNumber of not dog="**,**results\_stats\_dic**[**'n\_notdogs\_img'**]** **,**

"\nNumber of correct dogs="**,**results\_stats\_dic**[**'n\_correct\_dogs'**],**

"\nNumber of correct not dogs="**,**results\_stats\_dic**[**'n\_correct\_notdogs'**],**

"\nPercent of match="**,**results\_stats\_dic**[**'pct\_match'**],**

"\nPercent of correct no dog="**,**results\_stats\_dic**[**'pct\_correct\_notdogs'**],**

"\nPercent of correct dog="**,**results\_stats\_dic**[**'pct\_correct\_dogs'**])**

#XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX END LAB6 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

# In ra ket qua thong ke cac thong so

**print(**"\n Results Summary for CNN Model Architecture : VGG"**)**

**print(**"%25s: %3d" **%** **(**'Number Images'**,**results\_stats\_dic**[**'n\_images'**]))**

**print(**"%25s: %3d" **%** **(**'Number Dog Images'**,**results\_stats\_dic**[**'n\_dogs\_img'**]))**

**print(**"%25s: %3d" **%** **(**'Number Not-Dog Images'**,**results\_stats\_dic**[**'n\_notdogs\_img'**]),**'\n'**)**

# in ra ket qua tong

**for** key **in** results\_stats\_dic**:**

**if** key**[**0**]** **==** 'p'**:**

**print(**"%25s: %5.1f" **%** **(**key**,**results\_stats\_dic**[**key**]))**

# IF print\_incorrect\_dogs == True AND there were images incorrectly

# classified as dogs or vice versa - print out these cases

**if** **((**results\_stats\_dic**[**'n\_correct\_dogs'**]** **+** results\_stats\_dic**[**'n\_correct\_notdogs'**])!=** results\_stats\_dic**[**'n\_images'**]):**

**print(**"\n INCORRECT Dog/NOT Dog Assignments: "**)**

# process through results dict,printing incorrectly classified dogs

* **Hình ảnh**

# process through results dict,printing incorrectly classified dogs

**for** key **in** results\_dic**:**

# Pet Image Label is a Dog - Classified as NOT-A-DOG -OR-

# Pet Image Label is NOT-a-Dog - Classified as a-DOG

**if** sum**(**results\_dic**[**key**][**3**:])** **==** 1**:**

**print(**"Real: %-26s Classifier: %-30s" **%** **(**results\_dic**[**key**][**0**],**results\_dic**[**key**][**1**]))**

# IF print\_incorrect\_breed == True AND there were dogs whose breeds

# were incorrectly classified - print out these cases

**if** **(**results\_stats\_dic**[**'n\_correct\_dogs'**]** **!=** results\_stats\_dic**[**'n\_correct\_breed'**]):**

**print(**"\nINCORRECT Dog Breed Assignment:"**)**

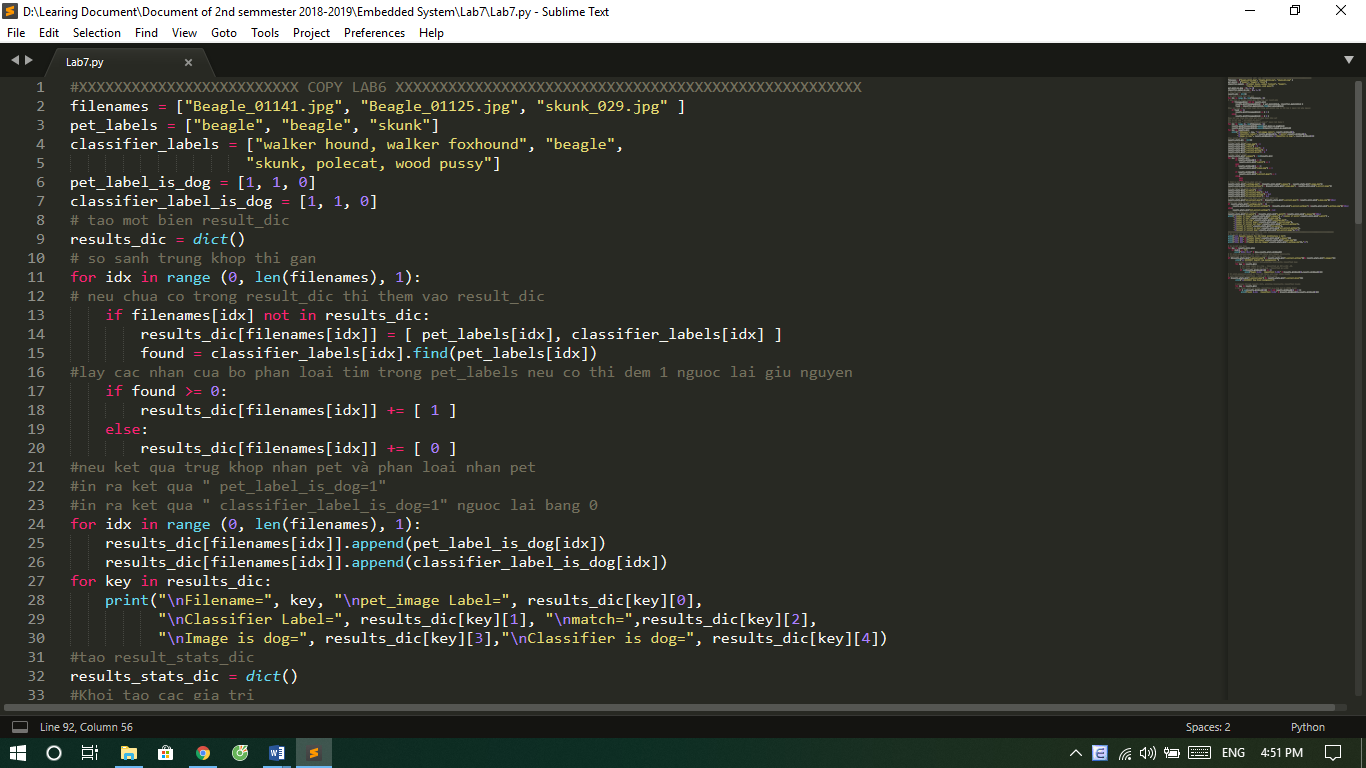
# process through results dict, printing incorrectly classified breeds

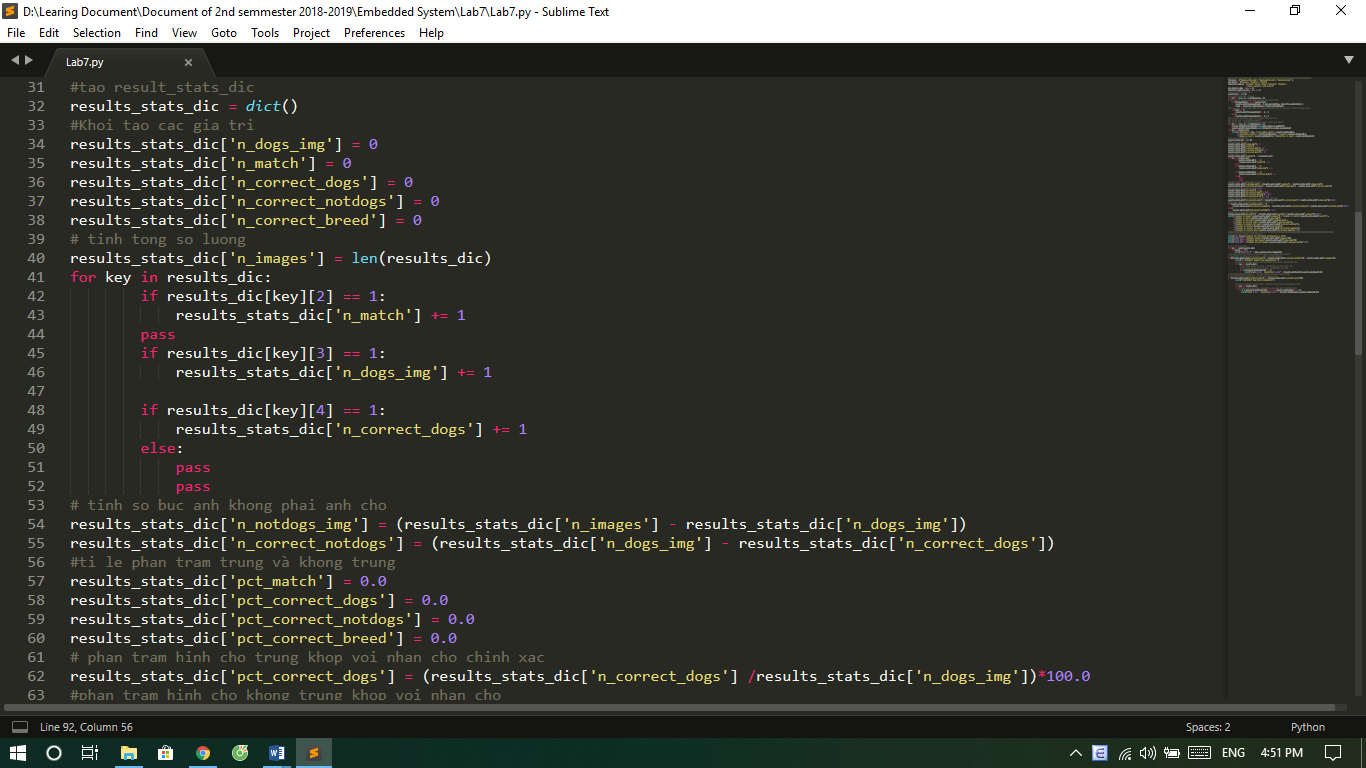
**for** key **in** results\_dic**:**

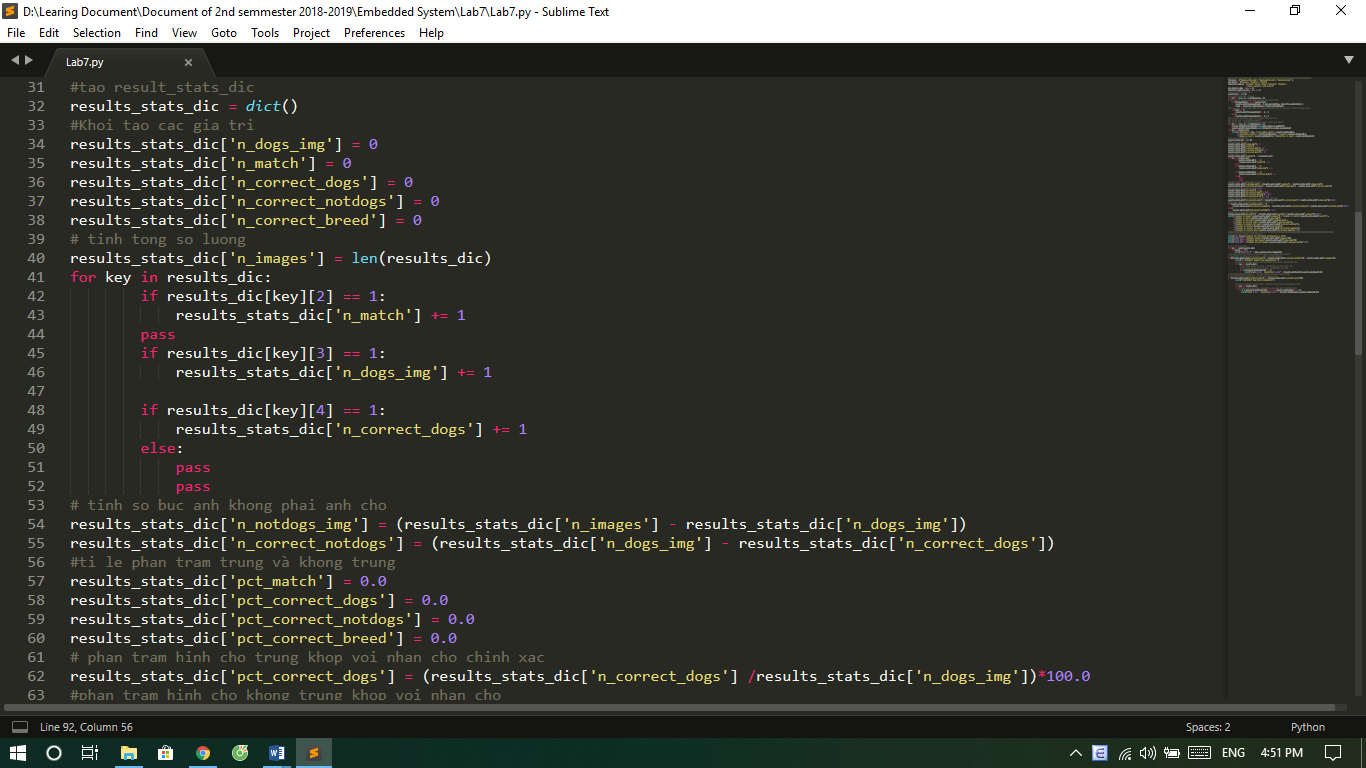
# Pet Image Label is-a-Dog, classified as-a-dog but is WRONG breed

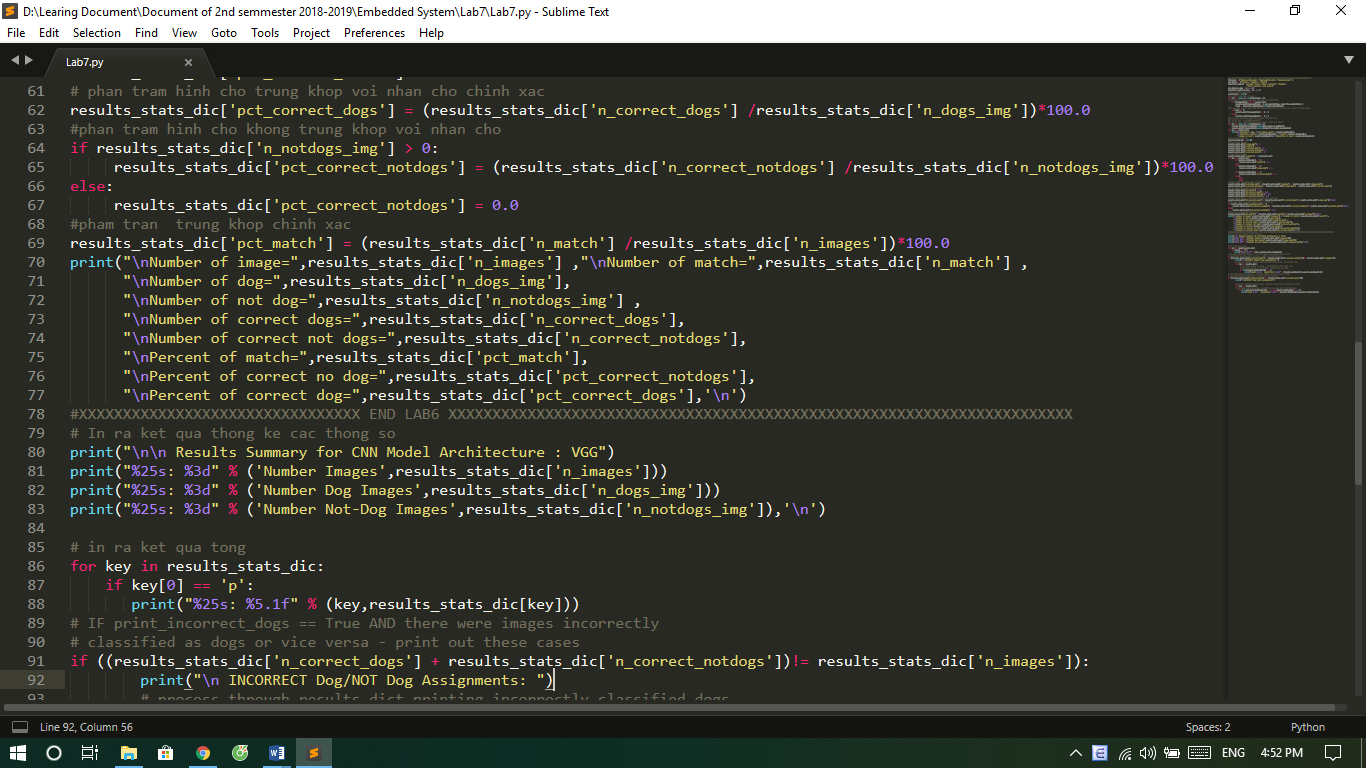
**if** **(** sum**(**results\_dic**[**key**][**3**:])** **==** 2 **and** results\_dic**[**key**][**2**]** **==** 0 **):**

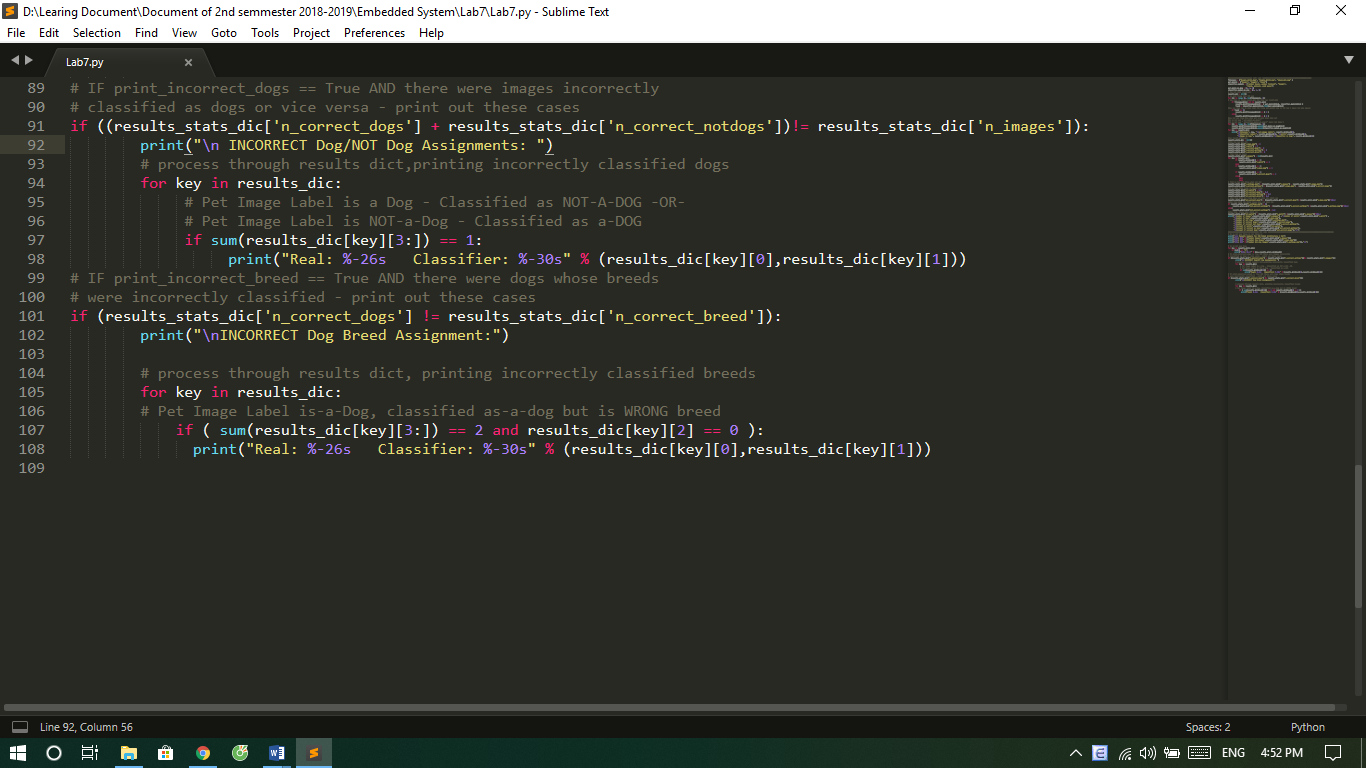
**print(**"Real: %-26s Classifier: %-30s" **%** **(**results\_dic**[**key**][**0**],**results\_dic**[**key**][**1**]))**

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**2. Kết quả**

