root@1f97922413f3:/home/workspace# python check\_images.py

Downloading: "https://download.pytorch.org/models/resnet18-5c106cde.pth" to /root/.torch/models/resnet18-5c106cde.pth

100%|██████████████████████████████████████████████████████████████| 46827520/46827520 [00:00<00:00, 55502121.63it/s]

Downloading: "https://download.pytorch.org/models/alexnet-owt-4df8aa71.pth" to /root/.torch/models/alexnet-owt-4df8aa71.pth

100%|████████████████████████████████████████████████████████████| 244418560/244418560 [00:03<00:00, 79463898.71it/s]

Downloading: "https://download.pytorch.org/models/vgg16-397923af.pth" to /root/.torch/models/vgg16-397923af.pth

100%|████████████████████████████████████████████████████████████| 553433881/553433881 [00:05<00:00, 98766142.92it/s]

Argument 1: pet\_images/

Command Line Arguments:

dir = pet\_images/

arch = alexnet

dogfile = dognames.txt

Pet Image Label Dictionary has 40 key-value pairs.

Below are 10 of them:

1 key: Golden\_retriever\_05195.jpg label: goldenretriever

2 key: Boston\_terrier\_02259.jpg label: bostonterrier

3 key: German\_shorthaired\_pointer\_04986.jpg label: germanshorthairedpointer

4 key: Saint\_bernard\_08010.jpg label: saintbernard

5 key: Great\_pyrenees\_05435.jpg label: greatpyrenees

6 key: Basenji\_00974.jpg label: basenji

7 key: Boston\_terrier\_02303.jpg label: bostonterrier

8 key: Miniature\_schnauzer\_06884.jpg label: miniatureschnauzer

9 key: Boston\_terrier\_02285.jpg label: bostonterrier

10 key: cat\_01.jpg label: cat

MATCH:

Rabbit\_002.jpg:

Real: rabbit Classifier: wood rabbit, cottontail, cottontail rabbit, rabbit

Poodle\_07927.jpg:

Real: poodle Classifier: standard poodle, poodle

cat\_07.jpg:

Real: cat Classifier: egyptian cat, cat

cat\_02.jpg:

Real: cat Classifier: tiger cat, cat

Poodle\_07956.jpg:

Real: poodle Classifier: standard poodle, poodle

NOT A MATCH:

Golden\_retriever\_05195.jpg:

Real: goldenretriever Classifier: golden retriever

Boston\_terrier\_02259.jpg:

Real: bostonterrier Classifier: boston bull, boston terrier

German\_shorthaired\_pointer\_04986.jpg:

Real: germanshorthairedpointer Classifier: german shorthaired pointer

Saint\_bernard\_08010.jpg:

Real: saintbernard Classifier: saint bernard, st bernard

Great\_pyrenees\_05435.jpg:

Real: greatpyrenees Classifier: great pyrenees

Basenji\_00974.jpg:

Real: basenji Classifier: basenji

Boston\_terrier\_02303.jpg:

Real: bostonterrier Classifier: boston bull, boston terrier

Miniature\_schnauzer\_06884.jpg:

Real: miniatureschnauzer Classifier: miniature schnauzer

Boston\_terrier\_02285.jpg:

Real: bostonterrier Classifier: basenji

cat\_01.jpg:

Real: cat Classifier: african hunting dog, hyena dog, cape hunting dog, lycaon pictus

German\_shepherd\_dog\_04931.jpg:

Real: germanshepherddog Classifier: german shepherd, german shepherd dog, german police dog, alsatian

fox\_squirrel\_01.jpg:

Real: foxsquirrel Classifier: fox squirrel, eastern fox squirrel, sciurus niger

Golden\_retriever\_05223.jpg:

Real: goldenretriever Classifier: golden retriever

gecko\_80.jpg:

Real: gecko Classifier: tree frog, tree-frog

Dalmatian\_04037.jpg:

Real: dalmatian Classifier: dalmatian, coach dog, carriage dog

Basset\_hound\_01034.jpg:

Real: bassethound Classifier: basset, basset hound

Beagle\_01141.jpg:

Real: beagle Classifier: english foxhound

Golden\_retriever\_05182.jpg:

Real: goldenretriever Classifier: tibetan mastiff

Boxer\_02426.jpg:

Real: boxer Classifier: boxer

Saint\_bernard\_08036.jpg:

Real: saintbernard Classifier: saint bernard, st bernard

German\_shepherd\_dog\_04890.jpg:

Real: germanshepherddog Classifier: german shepherd, german shepherd dog, german police dog, alsatian

gecko\_02.jpg:

Real: gecko Classifier: alligator lizard

Great\_dane\_05320.jpg:

Real: greatdane Classifier: great dane

Collie\_03797.jpg:

Real: collie Classifier: collie

Dalmatian\_04068.jpg:

Real: dalmatian Classifier: dalmatian, coach dog, carriage dog

Great\_pyrenees\_05367.jpg:

Real: greatpyrenees Classifier: kuvasz

Dalmatian\_04017.jpg:

Real: dalmatian Classifier: dalmatian, coach dog, carriage dog

Basenji\_00963.jpg:

Real: basenji Classifier: basenji

polar\_bear\_04.jpg:

Real: polarbear Classifier: ice bear, polar bear, ursus maritimus, thalarctos maritimus

Beagle\_01170.jpg:

Real: beagle Classifier: walker hound, walker foxhound

Cocker\_spaniel\_03750.jpg:

Real: cockerspaniel Classifier: cocker spaniel, english cocker spaniel, cocker

skunk\_029.jpg:

Real: skunk Classifier: skunk, polecat, wood pussy

Golden\_retriever\_05257.jpg:

Real: goldenretriever Classifier: afghan hound, afghan

Beagle\_01125.jpg:

Real: beagle Classifier: beagle

great\_horned\_owl\_02.jpg:

Real: greathornedowl Classifier: ruffed grouse, partridge, bonasa umbellus

# Total Images 40 # Matches: 5 # NOT Matches: 35

MATCH:

Rabbit\_002.jpg:

Real: rabbit Classifier: wood rabbit, cottontail, cottontail rabbit, rabbit

PetLabelDog: 0 ClassLabelDog: 0

Poodle\_07927.jpg:

Real: poodle Classifier: standard poodle, poodle

PetLabelDog: 1 ClassLabelDog: 1

cat\_07.jpg:

Real: cat Classifier: egyptian cat, cat

PetLabelDog: 0 ClassLabelDog: 0

cat\_02.jpg:

Real: cat Classifier: tiger cat, cat

PetLabelDog: 0 ClassLabelDog: 0

Poodle\_07956.jpg:

Real: poodle Classifier: standard poodle, poodle

PetLabelDog: 1 ClassLabelDog: 1

NOT A MATCH:

Golden\_retriever\_05195.jpg:

Real: goldenretriever Classifier: golden retriever

PetLabelDog: 0 ClassLabelDog: 1

Boston\_terrier\_02259.jpg:

Real: bostonterrier Classifier: boston bull, boston terrier

PetLabelDog: 0 ClassLabelDog: 1

German\_shorthaired\_pointer\_04986.jpg:

Real: germanshorthairedpointer Classifier: german shorthaired pointer

PetLabelDog: 0 ClassLabelDog: 1

Saint\_bernard\_08010.jpg:

Real: saintbernard Classifier: saint bernard, st bernard

PetLabelDog: 0 ClassLabelDog: 1

Great\_pyrenees\_05435.jpg:

Real: greatpyrenees Classifier: great pyrenees

PetLabelDog: 0 ClassLabelDog: 1

Basenji\_00974.jpg:

Real: basenji Classifier: basenji

PetLabelDog: 1 ClassLabelDog: 1

Boston\_terrier\_02303.jpg:

Real: bostonterrier Classifier: boston bull, boston terrier

PetLabelDog: 0 ClassLabelDog: 1

Miniature\_schnauzer\_06884.jpg:

Real: miniatureschnauzer Classifier: miniature schnauzer

PetLabelDog: 0 ClassLabelDog: 1

Boston\_terrier\_02285.jpg:

Real: bostonterrier Classifier: basenji

PetLabelDog: 0 ClassLabelDog: 1

cat\_01.jpg:

Real: cat Classifier: african hunting dog, hyena dog, cape hunting dog, lycaon pictus

PetLabelDog: 0 ClassLabelDog: 0

German\_shepherd\_dog\_04931.jpg:

Real: germanshepherddog Classifier: german shepherd, german shepherd dog, german police dog, alsatian

PetLabelDog: 0 ClassLabelDog: 1

fox\_squirrel\_01.jpg:

Real: foxsquirrel Classifier: fox squirrel, eastern fox squirrel, sciurus niger

PetLabelDog: 0 ClassLabelDog: 0

Golden\_retriever\_05223.jpg:

Real: goldenretriever Classifier: golden retriever

PetLabelDog: 0 ClassLabelDog: 1

gecko\_80.jpg:

Real: gecko Classifier: tree frog, tree-frog

PetLabelDog: 0 ClassLabelDog: 0

Dalmatian\_04037.jpg:

Real: dalmatian Classifier: dalmatian, coach dog, carriage dog

PetLabelDog: 1 ClassLabelDog: 1

Basset\_hound\_01034.jpg:

Real: bassethound Classifier: basset, basset hound

PetLabelDog: 0 ClassLabelDog: 1

Beagle\_01141.jpg:

Real: beagle Classifier: english foxhound

PetLabelDog: 1 ClassLabelDog: 1

Golden\_retriever\_05182.jpg:

Real: goldenretriever Classifier: tibetan mastiff

PetLabelDog: 0 ClassLabelDog: 1

Boxer\_02426.jpg:

Real: boxer Classifier: boxer

PetLabelDog: 1 ClassLabelDog: 1

Saint\_bernard\_08036.jpg:

Real: saintbernard Classifier: saint bernard, st bernard

PetLabelDog: 0 ClassLabelDog: 1

German\_shepherd\_dog\_04890.jpg:

Real: germanshepherddog Classifier: german shepherd, german shepherd dog, german police dog, alsatian

PetLabelDog: 0 ClassLabelDog: 1

gecko\_02.jpg:

Real: gecko Classifier: alligator lizard

PetLabelDog: 0 ClassLabelDog: 0

Great\_dane\_05320.jpg:

Real: greatdane Classifier: great dane

PetLabelDog: 0 ClassLabelDog: 1

Collie\_03797.jpg:

Real: collie Classifier: collie

PetLabelDog: 1 ClassLabelDog: 1

Dalmatian\_04068.jpg:

Real: dalmatian Classifier: dalmatian, coach dog, carriage dog

PetLabelDog: 1 ClassLabelDog: 1

Great\_pyrenees\_05367.jpg:

Real: greatpyrenees Classifier: kuvasz

PetLabelDog: 0 ClassLabelDog: 1

Dalmatian\_04017.jpg:

Real: dalmatian Classifier: dalmatian, coach dog, carriage dog

PetLabelDog: 1 ClassLabelDog: 1

Basenji\_00963.jpg:

Real: basenji Classifier: basenji

PetLabelDog: 1 ClassLabelDog: 1

polar\_bear\_04.jpg:

Real: polarbear Classifier: ice bear, polar bear, ursus maritimus, thalarctos maritimus

PetLabelDog: 0 ClassLabelDog: 0

Beagle\_01170.jpg:

Real: beagle Classifier: walker hound, walker foxhound

PetLabelDog: 1 ClassLabelDog: 1

Cocker\_spaniel\_03750.jpg:

Real: cockerspaniel Classifier: cocker spaniel, english cocker spaniel, cocker

PetLabelDog: 0 ClassLabelDog: 1

skunk\_029.jpg:

Real: skunk Classifier: skunk, polecat, wood pussy

PetLabelDog: 0 ClassLabelDog: 0

Golden\_retriever\_05257.jpg:

Real: goldenretriever Classifier: afghan hound, afghan

PetLabelDog: 0 ClassLabelDog: 1

Beagle\_01125.jpg:

Real: beagle Classifier: beagle

PetLabelDog: 1 ClassLabelDog: 1

great\_horned\_owl\_02.jpg:

Real: greathornedowl Classifier: ruffed grouse, partridge, bonasa umbellus

PetLabelDog: 0 ClassLabelDog: 0

# Total Images 40 # Matches: 5 # NOT Matches: 35

\*\* Statistics from calculates\_results\_stats() function:

N Images: 40 N Dog Images: 12 N NotDog Images: 28

Pct Corr dog: 100.0 Pct Corr NOTdog: 35.7 Pct Corr Breed: 16.7

\*\* Check Statistics - calculated from this function as a check:

N Images: 40 N Dog Images: 12 N NotDog Images: 28

Pct Corr dog: 100.0 Pct Corr NOTdog: 35.7 Pct Corr Breed: 16.7

\*\*\* Results Summary for CNN Model Architecture ALEXNET \*\*\*

N Images : 40

N Dog Images : 12

N Not-Dog Images : 28

pct\_match: 12.5

pct\_correct\_dogs: 100.0

pct\_correct\_breed: 16.7

pct\_correct\_notdogs: 35.7

INCORRECT Dog/NOT Dog Assignments:

Real: goldenretriever Classifier: golden retriever

Real: bostonterrier Classifier: boston bull, boston terrier

Real: germanshorthairedpointer Classifier: german shorthaired pointer

Real: saintbernard Classifier: saint bernard, st bernard

Real: greatpyrenees Classifier: great pyrenees

Real: bostonterrier Classifier: boston bull, boston terrier

Real: miniatureschnauzer Classifier: miniature schnauzer

Real: bostonterrier Classifier: basenji

Real: germanshepherddog Classifier: german shepherd, german shepherd dog, german police dog, alsatian

Real: goldenretriever Classifier: golden retriever

Real: bassethound Classifier: basset, basset hound

Real: goldenretriever Classifier: tibetan mastiff

Real: saintbernard Classifier: saint bernard, st bernard

Real: germanshepherddog Classifier: german shepherd, german shepherd dog, german police dog, alsatian

Real: greatdane Classifier: great dane

Real: greatpyrenees Classifier: kuvasz

Real: cockerspaniel Classifier: cocker spaniel, english cocker spaniel, cocker

Real: goldenretriever Classifier: afghan hound, afghan

INCORRECT Dog Breed Assignment:

Real: basenji Classifier: basenji

Real: dalmatian Classifier: dalmatian, coach dog, carriage dog

Real: beagle Classifier: english foxhound

Real: boxer Classifier: boxer

Real: collie Classifier: collie

Real: dalmatian Classifier: dalmatian, coach dog, carriage dog

Real: dalmatian Classifier: dalmatian, coach dog, carriage dog

Real: basenji Classifier: basenji

Real: beagle Classifier: walker hound, walker foxhound

Real: beagle Classifier: beagle

\*\* Total Elapsed Runtime: 0:0:4

root@1f97922413f3:/home/workspace#