RESULTS from uploaded photos:

# Total of Photos	4
# of Dog Photos	2
# of Not Dog Photos	2

Model Architecture	% Match	% Correct Dog	% Correct Breed	% Correct Not Dogs
Alexnet	50	50	50	50
Res_net	25	50	50	100
VGG	25	50	50	100

1. Did the three model architectures classify the breed of dog in *Dog_01.jpg* to be the same breed? If not, report the differences in the classifications.

All three model architectures correctly classified the breed of dog in Dog_01.jpg (Classifier: german shepherd, german shepherd dog, german police dog, alsatian)

2. Did each of the three model architectures classify the breed of dog in *Dog_01.jpg* to be the same breed of dog as that model architecture classified *Dog_02.jpg*? If not, report the differences in the classifications.

None of the three model architectures correctly classified the breed of dog correctly. (The image was rotated 180°.

Resnet classified the image as a hummingbird.

Alexnet classified the image as a tub or vat.

VGG classified the image as a mongoose.

3. Did the three model architectures correctly classify *Animal_Name_01.jpg* and *Object_Name_01.jpg* to **not** be dogs? If not, report the misclassifications.

Whereas all three model architectures correctly classified the pet labels as dog or not dog properly, Alexnet classified the rabbit_01.jpg image as a dog, specifically a clumber, clumber spaniel.

Resnet and VGG classified the lop ear rabbit photo as a guinea pig, cavia cobaya.

Resnet and VGG also classified the arch_01.jpg image as vault - interior structure which is much closer than Alexnet's triumphal arch - a standalone structure.

4. Based upon your answers for questions **1.** - **3.** above, select the model architecture that you feel did the *best* at classifying the four *uploaded images*. Describe *why* you selected that model architecture as the *best* on uploaded image classification.

Based on the above, I would select VGG as the best model architecture.

Although Resnet has the same percentage correct as VGG, Resnet classified the Dog_02.jpg as a hummingbird. VGG classified the same image as a mongoose which is not accurate, but at least a mongoose is the has a snout and four legs rather than a beak and wings.

Alexnet is too 'indecisive' with 50% correct classifications across the board. I found it interesting that it classified the arch_01.jpg image as a triumphal arch and made me wonder how this model was trained.