MobileNet method

```
import keras
from keras.layers.core import Dense, Activation
from keras.preprocessing import image
from keras.models import Model
from keras.applications import imagenet_utils
from keras.layers import Dense,GlobalAveragePooling2D
from keras.applications import MobileNet
from keras.applications.mobilenet import preprocess_input
import numpy as np
from IPython.display import Image
from keras.optimizers import Adam
```

Crocodile prediction

```
mobile = keras.applications.MobileNet()
def prepare_image(file):
    img_path = ''
    img = image.load_img(img_path + file, target_size=(224, 224))
    img_array = image.img_to_array(img)
    img_array_expanded_dims = np.expand_dims(img_array, axis=0)
    return keras.applications.mobilenet.preprocess_input(img_array_expanded_dims)
```

```
a=Image(filename='/content/crocodile.jpg')
```

```
preprocessed_image = prepare_image('/content/crocodile.jpg')
predictions = mobile.predict(preprocessed_image)
results = imagenet_utils.decode_predictions(predictions)
```

```
results
```

```
[[('n01697457', 'African_crocodile', 0.9891728),
  ('n01698640', 'American_alligator', 0.008904232),
  ('n01675722', 'banded_gecko', 0.0009795052),
  ('n01685808', 'whiptail', 0.0001850704),
  ('n01688243', 'frilled_lizard', 0.00014101264)]]
```

```
results[0][0]
```

```
('n01697457', 'African_crocodile', 0.9891728)
```

Coffee mug prediction

```
preprocessed_image = prepare_image('/content/black-6.jpg')
predictions = mobile.predict(preprocessed_image)
results = imagenet_utils.decode_predictions(predictions)
results[0][0]
```

```
('n03063599', 'coffee_mug', 0.80025417)
```