# Jupyter Notebook Summary

## Code Cell

from google.colab import drive  
import glob  
  
# Mount Google Drive  
drive.mount('/content/drive')  
  
# Load all images from a specific directory  
image\_paths = glob.glob('/content/drive/MyDrive/Images/\*.jpg') # Adjust path as needed  
  
for path in image\_paths:  
 results = model(path)  
 results.show() # Or save the results

## Code Cell

from google.colab import files  
uploaded\_files = "/content/drive/MyDrive/objectdection"

## Code Cell

# Step 1: Load YOLOv5 model  
import torch  
import os  
import glob  
import cv2  
from google.colab.patches import cv2\_imshow  
import shutil

## Code Cell

# Load the YOLOv5 model  
model = torch.hub.load('ultralytics/yolov5', 'yolov5s', source='github')  
  
# Step 2: Define the directory containing images  
uploaded\_files = "/content/drive/MyDrive/objectdection" # Replace with your actual path  
  
# Step 3: Clear the output directory before each run to avoid duplicates  
output\_dir = "runs/detect"  
if os.path.exists(output\_dir):  
 shutil.rmtree(output\_dir) # Remove the existing output directory to start fresh  
  
# Step 4: Run inference on each image in the input directory and save results  
for filename in os.listdir(uploaded\_files):  
 file\_path = os.path.join(uploaded\_files, filename)  
  
 # Check if it's an image file  
 if os.path.isfile(file\_path):  
 # Run YOLOv5 inference  
 results = model(file\_path)  
 results.save() # Save images with bounding boxes

## Code Cell

# Step 5: Display saved images from the output directory  
saved\_images = glob.glob(f"{output\_dir}/exp\*/\*\*/\*.jpg", recursive=True)  
  
if not saved\_images:  
 print("No images found. Please check if the images are saved correctly.")  
else:  
 for image\_path in saved\_images:  
 annotated\_image = cv2.imread(image\_path)  
 if annotated\_image is not None:  
 cv2\_imshow(annotated\_image)  
 else:  
 print(f"Failed to read image: {image\_path}")