[﻿﻿﻿Install WSL | Microsoft Learn](https://learn.microsoft.com/en-us/windows/wsl/install)

wsl –install

<https://itsfoss.com/install-pycharm-ubuntu/>  
<https://www.jetbrains.com/pycharm/download/#section=linux>

sudo snap install pycharm-community –classic

[How To Install Python 3 and Set Up a Programming Environment on an Ubuntu 20.04 Server | DigitalOcean](https://www.digitalocean.com/community/tutorials/how-to-install-python-3-and-set-up-a-programming-environment-on-an-ubuntu-20-04-server)

sudo apt update

sudo apt -y upgrade  
sudo apt install libgl1-mesa-glx  
sudo apt install -y python3-pip

sudo apt install -y build-essential libssl-dev libffi-dev python3-dev

sudo apt install -y python3-venv

mkdir environments

python3 -m venv my\_env

source my\_env/bin/activate

**Copy files to Ubuntu:**

cp /mnt/c/Users/ryang/PycharmProjects/Cal/\*.\* /home/offiry/environments/cal  
cp /home/offiry/environments/ buildozer.spec /home/offiry/environments/cal/

cp /mnt/c/Users/shpry/PycharmProjects/my\_kivy\_project/hello/main.py /home/shpyang/my\_kivy\_project/cal/

**pre-install needed packages:**

sudo pip install buildozer  
sudo pip install cython==0.29.34  
sudo apt install default-jdk  
sudo apt install unzip  
sudo apt install sdkmanager  
sudo apt update && sudo apt install android-sdk  
sudo apt-get install autoconf automake libtool  
sudo apt-get install zip

sudo apt install cmake

**For new APPs, start from here:  
sudo buildozer init**nano buildozer.spec

**sudo buildozer android debug  
sudo buildozer -Q android debug**

**sudo buildozer android clean**

buildozer android clean

cp /home/offiry/environments/cal/bin/\*.\* /mnt/c/Users/ryang/PycharmProjects/Cal/

If you are using ubuntu, go to pycharm/bin folder and run pycharm.sh file using below command  
 ./pycharm.sh  
/bin/ pycharm.sh  
  
  
cp /mnt/c/Users/shpry/PycharmProjects/my\_kivy\_project/hello/day.png /home/shpyang/my\_kivy\_project//cal/day.png

cp /mnt/c/Users/ryang/PycharmProjects/cal/main.py /home/offiry/environments/cal/main.py  
  
  
pip install buildozer  
buildozer init  
pip install cython==0.29.34  
sudo apt install default-jdk  
sudo apt install unzip  
sudo apt install sdkmanager  
sudo apt update && sudo apt install android-sdk  
buildozer -v android debug  
buildozer -Q android debug  
  
cp /home/shpyang/my\_kivy\_project/hello/buildozer.spec /mnt/c/Users/shpry/PycharmProjects/my\_kivy\_project/hello/buildozer.spec   
  
cp /mnt/c/Users/shpry/PycharmProjects/my\_kivy\_project/hello/buildozer.spec /home/shpyang/my\_kivy\_project/hello/buildozer.spec  
  
  
sudo pip install buildozer  
sudo pip install cython==0.29.34  
sudo apt install default-jdk  
sudo apt install unzip  
sudo apt install sdkmanager  
sudo apt update && sudo apt install android-sdk  
sudo apt-get install autoconf automake libtool  
sudo apt-get install zip  
  
 sudo buildozer init  
sudo buildozer android debug  
sudo buildozer –Q android debug  
  
cp /home/shpyang/my\_kivy\_project/hello/bin/\*.\* /mnt/c/Users/shpry/PycharmProjects/my\_kivy\_project/hello/  
  
cp /mnt/c/Users/ryang/PycharmProjects/cal/ png /home/offiry/environments/cal/  
  
cp /mnt/c/Users/ryang/PycharmProjects/cal/main.py /home/offiry/environments/cal/  
  
cp /home/offiry/environments/cal/bin/distsim-0.1-arm64-v8a\_armeabi-v7a-debug.apk /mnt/c/Users/ryang/PycharmProjects/cal/

sudo buildozer init

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cp /mnt/c/Users/ryang/PycharmProjects/cal/buildozer.spec /home/offiry/environments/cal/

cp /mnt/c/Users/ryang/PycharmProjects/cal/mainMMM.py /home/offiry/environments/cal/main.py

sudo buildozer -Q android debug

cd bin

sudo cp distsim-0.1-arm64-v8a\_armeabi-v7a-debug.apk plotv12.apk

cp /home/offiry/environments/cal/bin/plotv12.apk /mnt/c/Users/ryang/PycharmProjects/cal/

cd ..

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cp /mnt/c/Users/ryang/PycharmProjects/FoodSaver/main.py /home/offiry/environments/food/

sudo buildozer -Q android debug

cd bin

sudo cp foodsaver-1.0.1-arm64-v8a\_armeabi-v7a-debug.apk food.apk

cp /home/offiry/environments/food/bin/food.apk /mnt/c/Users/ryang/PycharmProjects/FoodSaver/

cd ..

cp /mnt/c/Users/ryang/PycharmProjects/cal/buildozer.spec /home/offiry/environments/cal/

cp /mnt/c/Users/ryang/PycharmProjects/cal/mainMMM.py /home/offiry/environments/cal/main.py

sudo buildozer -v android release

cd bin

sudo cp distsim-0.1-arm64-v8a\_armeabi-v7a-release.aab DistSim.aab

cp /home/offiry/environments/cal/bin/DistSim.aab /mnt/c/Users/ryang/PycharmProjects/cal/

cd ..

# signed build

# go to root

Mkdir –p ~/keystores/

keytool -genkey -v -keystore ~/keystores/DistSim.keystore -alias DistSim -keyalg RSA -keysize 2048 -validity 10000

sudo P4A\_RELEASE\_KEYSTORE=/home/offiry/keystores/DistSim.keystore P4A\_RELEASE\_KEYALIAS=DistSim P4A\_RELEASE\_KEYALIAS\_PASSWD=88888888 P4A\_RELEASE\_KEYSTORE\_PASSWD=88888888 buildozer android release

cd bin

sudo cp distsim-0.1-arm64-v8a\_armeabi-v7a-release.aab DistSim.aab

cp /home/offiry/environments/cal/bin/DistSim.aab /mnt/c/Users/ryang/PycharmProjects/cal/

cd ..

cp /mnt/c/Users/ryang/PycharmProjects/FoodSaver/receipt.png /home/offiry/environments/food/receipt.png

pytesseract.pytesseract.tesseract\_cmd = C:\Program Files\Tesseract-OCR\tesseract.exe'

cp /mnt/c/Users/ryang/PycharmProjects/scan/test1.png /home/offiry/environments/scan/

cp /mnt/c/Users/ryang/PycharmProjects/FoodSaver/main.py /home/offiry/environments/food/