Install Python Packages

1. **Virtualenv**

```
C:\Users\Hari\Desktop\yolo_structure>py -m pip install virtualenv
Requirement already satisfied: virtualenv in c:\python310\lib\site-packages (20.13.3)
Requirement already satisfied: platformdirs<3,>=2 in c:\python310\lib\site-packages (from virtualenv) (2.5.1)
Requirement already satisfied: six<2,>=1.9.0 in c:\python310\lib\site-packages (from virtualenv) (1.16.0)
Requirement already satisfied: filelock<4,>=3.2 in c:\python310\lib\site-packages (from virtualenv) (3.6.0)
Requirement already satisfied: distlib<1,>=0.3.1 in c:\python310\lib\site-packages (from virtualenv) (0.3.4)
WARNING: There was an error checking the latest version of pip.

C:\Users\Hari\Desktop\yolo_structure>
```

2. **Activate Virtual environment**

```
C:\Users\Hari\Desktop\yolo_structure>cd venv

C:\Users\Hari\Desktop\yolo_structure\venv>cd Scripts

C:\Users\Hari\Desktop\yolo_structure\venv\Scripts>activate

(venv) C:\Users\Hari\Desktop\yolo_structure\venv\Scripts>cd ../..

(venv) C:\Users\Hari\Desktop\yolo_structure>
```

3. **Tensorflow**

```
(venv) C:\Users\Hari\Desktop\yolo_structure>pip install tensorflow
Collecting tensorflow
  Using cached tensorflow-2.11.0-cp310-cp310-win_amd64.whl (1.9 kB)
Collecting tensorflow-intel==2.11.0
  Downloading tensorflow_intel-2.11.0-cp310-cp310-win_amd64.whl (266.3 MB)
                                          ───────── 266.3/266.3 MB 2.1 MB/s eta 0:00:00
Collecting libclang>=13.0.0
  Downloading libclang-14.0.6-py2.py3-none-win_amd64.whl (14.2 MB)
                                          ───────── 14.2/14.2 MB 2.2 MB/s eta 0:00:00
Collecting packaging
  Using cached packaging-21.3-py3-none-any.whl (40 kB)
Requirement already satisfied: setuptools in c:\users\hari\desktop\yolo_structure\venv\lib\site-packages (f
w-intel==2.11.0->tensorflow) (65.5.1)
Collecting protobuf<3.20,>=3.9.2
  Downloading protobuf-3.19.6-cp310-cp310-win_amd64.whl (895 kB)
                                          ───────── 895.7/895.7 kB 2.4 MB/s eta 0:00:00
Collecting wrapt>=1.11.0
  Using cached wrapt-1.14.1-cp310-cp310-win_amd64.whl (35 kB)
Collecting opt-einsum>=2.3.2
  Downloading opt_einsum-3.3.0-py3-none-any.whl (65 kB)
                                          ───────── 65.5/65.5 kB 1.8 MB/s eta 0:00:00
Collecting tensorflow-io-gcs-filesystem>=0.23.1
  Downloading tensorflow_io_gcs_filesystem-0.27.0-cp310-cp310-win_amd64.whl (1.5 MB)
                                          ───────── 1.5/1.5 MB 3.4 MB/s eta 0:00:00
Collecting gast<=0.4.0,>=0.2.1
  Downloading gast-0.4.0-py3-none-any.whl (9.8 kB)
Collecting grpcio<2.0,>=1.24.3
  Downloading grpcio-1.50.0-cp310-cp310-win_amd64.whl (3.6 MB)
                                          ───────── 3.6/3.6 MB 1.7 MB/s eta 0:00:00
```

```
  Using cached requests_oauthlib-1.3.1-py2.py3-none-any.whl (23 kB)
Collecting idna<4,>=2.5
  Using cached idna-3.4-py3-none-any.whl (61 kB)
Collecting certifi>=2017.4.17
  Using cached certifi-2022.9.24-py3-none-any.whl (161 kB)
Collecting urllib3<1.27,>=1.21.1
  Using cached urllib3-1.26.12-py2.py3-none-any.whl (140 kB)
Collecting charset-normalizer<3,>=2
  Using cached charset_normalizer-2.1.1-py3-none-any.whl (39 kB)
Collecting MarkupSafe>=2.1.1
  Using cached MarkupSafe-2.1.1-cp310-cp310-win_amd64.whl (17 kB)
Collecting pyasn1<0.5.0,>=0.4.6
  Using cached pyasn1-0.4.8-py2.py3-none-any.whl (77 kB)
Collecting oauthlib>=3.0.0
  Downloading oauthlib-3.2.2-py3-none-any.whl (151 kB)
                                          ───────── 151.7/151.7 kB 1.8 MB/s eta 0:00:00
Installing collected packages: tensorboard-plugin-wit, pyasn1, libclang, flatbuffers, wrapt, urllib3, typing-extensions,
 termcolor, tensorflow-io-gcs-filesystem, tensorflow-estimator, tensorboard-data-server, six, rsa, pyparsing, pyasn1-mod
ules, protobuf, oauthlib, numpy, MarkupSafe, markdown, idna, gast, charset-normalizer, certifi, cachetools, absl-py, wer
kzeug, requests, packaging, opt-einsum, h5py, grpcio, google-pasta, google-auth, astunparse, requests-oauthlib, google-a
uth-oauthlib, tensorboard, tensorflow-intel, tensorflow
Successfully installed MarkupSafe-2.1.1 absl-py-1.3.0 astunparse-1.6.3 cachetools-5.2.0 certifi-2022.9.24 charset-normal
izer-2.1.1 flatbuffers-22.10.26 gast-0.4.0 google-auth-2.14.1 google-auth-oauthlib-0.4.6 google-pasta-0.2.0 grpcio-1.50.
0 h5py-3.7.0 idna-3.4 libclang-14.0.6 markdown-3.4.1 numpy-1.23.4 oauthlib-3.2.2 opt-einsum-3.3.0 packaging-21.3 protobu
f-3.19.6 pyasn1-0.4.8 pyasn1-modules-0.2.8 pyparsing-3.0.9 requests-2.28.1 requests-oauthlib-1.3.1 rsa-4.9 six-1.16.0 te
nsorboard-2.11.0 tensorboard-data-server-0.6.1 tensorboard-plugin-wit-1.8.1 tensorflow-2.11.0 tensorflow-estimator-2.11.
0 tensorflow-intel-2.11.0 tensorflow-io-gcs-filesystem-0.27.0 termcolor-2.1.0 typing-extensions-4.4.0 urllib3-1.26.12 we
rkzeug-2.2.2 wrapt-1.14.1

(venv) C:\Users\Hari\Desktop\yolo_structure>
```

4. Keras

```
(venv) C:\Users\Hari\Desktop\yolo_structure>pip install keras
Collecting keras
  Using cached keras-2.11.0-py2.py3-none-any.whl (1.7 MB)
Installing collected packages: keras
Successfully installed keras-2.11.0

(venv) C:\Users\Hari\Desktop\yolo_structure>
```

5. Opencv

```
(venv) C:\Users\Hari\Desktop\yolo_structure>pip install opencv-python
Collecting opencv-python
  Downloading opencv_python-4.6.0.66-cp36-abi3-win_amd64.whl (35.6 MB)
                                    35.6/35.6 MB 1.7 MB/s eta 0:00:00
Requirement already satisfied: numpy>=1.17.3 in c:\users\hari\desktop\yolo_structure\venv\li
-python) (1.23.4)
Installing collected packages: opencv-python
Successfully installed opencv-python-4.6.0.66
```

6. Pillow

```
(venv) C:\Users\Hari\Desktop\yolo_structure>pip install pillow
Collecting pillow
  Downloading Pillow-9.3.0-cp310-cp310-win_amd64.whl (2.5 MB)
                                    2.5/2.5 MB 1.4 MB/s eta 0:00:00
Installing collected packages: pillow
Successfully installed pillow-9.3.0
```

7. **Progress bar**

```
(venv) C:\Users\Hari\Desktop\yolo_structure>pip install progressbar
Collecting progressbar
  Downloading progressbar-2.5.tar.gz (10 kB)
  Preparing metadata (setup.py) ... done
Building wheels for collected packages: progressbar
  Building wheel for progressbar (setup.py) ... done
  Created wheel for progressbar: filename=progressbar-2.5-py3-none-any.whl size=12067 sha256=2e
ab7aef23bebf73705f5669b79e0395bca7254
  Stored in directory: c:\users\hari\appdata\local\pip\cache\wheels\87\80\e5\ebb505e651c0099350
8448b9d
Successfully built progressbar
Installing collected packages: progressbar
Successfully installed progressbar-2.5
```