Option 1: Installing Tensorflow via pip (recommended)

Step 1: Install Miniconda or Anaconda
If you have Miniconda or Anaconda installed, proceed to Step 2.

If not, download the Miniconda installer from https://docs.anaconda.com/miniconda/ for your operating system. Follow the instructions on the website to install Miniconda. It is recommended to choose the installation options suggested by the website or the default ones during the installation process.
After installing Miniconda, you may need to reopen the command line or restart your computer to make it work properly.

Step 2: Create a virtual environment
Using conda, create a virtual environment with Python version 3.10 by executing the following command in the command line:

```
conda create -n myenv python=3.10
```

where `myenv` is the name of the virtual environment you want to create. You can choose any name.
For guidance on managing virtual environments, see https://conda.io/projects/conda/en/latest/user-guide/tasks/manage-environments.html

Step 3: Activate the virtual environment and install necessary packages
Activate the virtual environment you created by executing:

```
conda activate myenv
```

Upgrade pip by executing:

```
pip install --upgrade pip
```

Install numpy, h5py, tensorflow, and jupyter notebook in the virtual environment by executing the following command:

```
pip install numpy h5py notebook tensorflow
```

GPU support for TensorFlow is *not* required.

Note: If you already have Jupyter Notebook or other packages installed, you still need to install them in the new virtual environment.

For TensorFlow installation instructions, also see https://www.tensorflow.org/install/pip

Step 4: Verify the installation
To verify the successful installation, execute the command:

```
python3 -c "import tensorflow as tf;
print(tf.reduce_sum(tf.random.normal([1000, 1000])))"
```

If the command outputs a number (tensor), the installation was successful.

Option 2: Using a Docker image

Choose this option if you have Docker installed.

Follow the instructions at https://www.tensorflow.org/install/docker (for reference, see also https://www.tensorflow.org/install). A Docker image with Jupyter installed is required. GPU support is *not* required.

If you encounter any issues with installing TensorFlow, please describe the problem and email ivan.kharuk@phystech.edu.