1. So, I have created an environment called ‘tf2’ in anaconda from the environment.yml file by using the following codes:

git clone <https://github.com/ageron/handson-ml2.git>

cd handson-ml2

conda env create -f environment.yml

It has all the necessary packages for machine learning like NumPy, pandas, scikit-learn, keras, TensorFlow, matplotlib, SciPy etc. I was able to successfully run all the commands/code in Chapter 1 of the textbook on Jupyter Notebook.

1. Two most common supervised tasks are:
   1. Regression
   2. Classification
2. Four common unsupervised tasks are:
   1. Clustering
   2. Visualization
   3. Dimensionality Reduction
   4. Association Rule Learning
3. If a model performs great on the training data but generalizes poorly to new instances, the model is likely overfitting the training data (or we got extremely lucky on the training data). Possible solutions to overfitting are:
   1. Getting more data,
   2. Simplifying the model (selecting a simpler algorithm, reducing the number of parameters or features used, or regularizing the model),
   3. Reducing the noise or eliminate outliers in the training data.