Answer the following questions and submit a pdf file with your answers in one week.

1. What is machine learning according to Mitchell?
2. What tasks machine learning can be applied to? And how? (Mention at least three tasks)
3. What are unsupervised learning and supervised learning?
4. How to model a linear regression problem and solve it?
5. What’s the meaning of i.i.d. assumption?
6. What’s the relationship between model capacity and overfitting?
7. What is regularization? Is there a best regularizer?