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

1. What are underflow and overflow? How to avoid the underflow and overflow problems of the softmax function?
2. What are stationary point and saddle point?
3. What is the line search method?
4. Describe the Newton’s method.
5. What function is Lipschitz continuous?
6. How to transform a constrained minimization problem to an unconstrained optimization problem?