## Methods review

### 1) Gradient Descent:

* [Gradient Descent, Step-by-Step](https://www.youtube.com/watch?v=sDv4f4s2SB8)
* Stochastic Gradient Descent - [Stochastic Gradient Descent, Clearly Explained](https://www.youtube.com/watch?v=vMh0zPT0tLI)
  + <https://www.coursera.org/lecture/machine-learning/stochastic-gradient-descent-DoRHJ>
* For reading <https://medium.com/bayshore-intelligence-solutions/why-is-stochastic-gradient-descent-2c17baf016de>

### 2) Support vector machine (SVM)

* [Support Vector Machines, Clearly Explained](https://www.youtube.com/watch?v=efR1C6CvhmE)
* For reading
  + <https://see.stanford.edu/materials/aimlcs229/cs229-notes3.pdf>
  + <https://towardsdatascience.com/support-vector-machine-simply-explained-fee28eba5496>

### 3) Naive Bayes

* [Naïve Bayes Classifier - Fun and Easy Machine Learning](https://www.youtube.com/watch?v=CPqOCI0ahss)
* For reading
  + <https://web.stanford.edu/~jurafsky/slp3/4.pdf>
  + <https://machinelearningmastery.com/naive-bayes-classifier-scratch-python/>

### 4) Examples

* <https://scikit-learn.org/stable/modules/sgd.html>
* <https://scikit-learn.org/stable/modules/svm.html>
* <https://scikit-learn.org/stable/modules/naive_bayes.html>

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## Basic NLP

### Simple intro

* + <https://becominghuman.ai/a-simple-introduction-to-natural-language-processing-ea66a1747b32>

### RegExps

* + Cheatsheet
    1. <http://web.mit.edu/hackl/www/lab/turkshop/slides/regex-cheatsheet.pdf>
    2. <https://developer.mozilla.org/en-US/docs/Web/JavaScript/Guide/Regular_Expressions/Cheatsheet>
    3. <https://medium.com/factory-mind/regex-tutorial-a-simple-cheatsheet-by-examples-649dc1c3f285>
  + NLP Stanford - Regular еxpressions (chapter 2.1) paper: <https://web.stanford.edu/~jurafsky/slp3/2.pdf>
  + Online Regex tester and debugger
    1. <https://regex101.com/>
    2. <https://regexr.com/>

### Examples of text preprocessing

* + <https://medium.com/@datamonsters/text-preprocessing-in-python-steps-tools-and-examples-bf025f872908>
  + <https://towardsdatascience.com/nlp-text-preprocessing-a-practical-guide-and-template-d80874676e79>