Neural Network lab2

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lab: environment setup

- Download anaconda software.
  - Linux and python 3
  - https://www.anaconda.com/download/#linux
  - File name: Anaconda3-5.0.1-Linux-x86_64.sh
- Put the file on folder named anaconda on your Desktop(your path).
- Open terminal (ctrl+alt+t)
  - cd Desktop/anaconda (your path)
  - chmod +x Anaconda3-5.0.1-Linux-x86_64.sh
    - to change the installer file's permissions so it can be executed.
  - sudo bash Anaconda3-5.0.1-Linux-x86_64.sh

To add your software to environment variable: path

- Firstly, check your original path:
- echo $PATH
  - It should show something like this:
  - /usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/bin:/usr/games Now add your program to that path, ensuring your using the entire path all the way from / to your program.
- export PATH=$PATH:/path/to/my/program
  - This sets your PATH variable to the existing PATH plus what you add to the end. Check that it has been added:
- echo $PATH
- **[Or]** Edit the bashrc file located at: /home/hadoop/.bashrc
  - export PATH=/home/hadoop/anaconda3/bin:$PATH

Used Tools

- Jupyter notebook:
  - Ipython notebook; Interactive coding environment embedded in web page.
  - To launch the local web server; write on the terminal : jupyter notebook
  - Run cell: shift + enter
  - To install packages in Jupyter:
    1. actual shell
    2. run the ! Prefix(ex, !pip install packagename)
  - Save as html or ipynb

- Implement
  - sigmoid fn and its gradient.
  - Image2vector fn
  - Normalize matrix rows fn
  - L1 and L2 loss fns