





Python coding

wk01:

Introduction to coding Python

Basic Python coding

INJE University

1st semester, 2020

Email: chaos21c@gmail.com



My ID

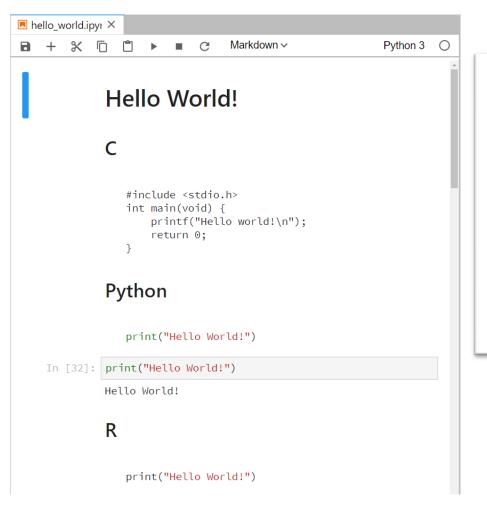
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• <u>py01</u>	旧바운
•py02	김다영
•py03	김대희
• <u>py04</u>	김동우
• <u>py05</u>	김민규
• <u>py06</u>	김범수
• <u>py07</u>	기시오
• <u>py08</u>	기재이
• <u>py09</u>	김호준
• <u>py10</u>	박미르
• <u>py11</u>	박시원
• <u>py12</u>	박은서
• <u>py13</u>	박태훈
• <u>py14</u>	양승준
• <u>py15</u>	여지선

```
•py16 여채운
•py17 오현영
•py18 이지선
•py19 장지훈
•py20 정재은
•py21 정연준
•py22 조민수
•ру23 хюн
•py24 천운서
•py25 최정운
•py26 한동민
•py27 여준하
```

"Hello World!" DEMO

Hello World!





```
Javascript (Node.js)

console.log("Hello World!")

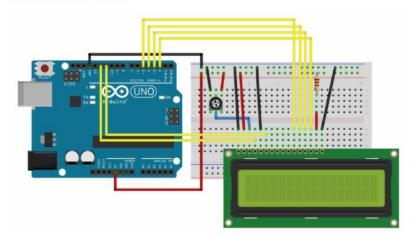
Java

public class HelloWorld {
    public static void main(String[] args) {
        // Prints "Hello, World" to the terminal window.
        System.out.println("Hello, World");
    }
}
```

Arduino

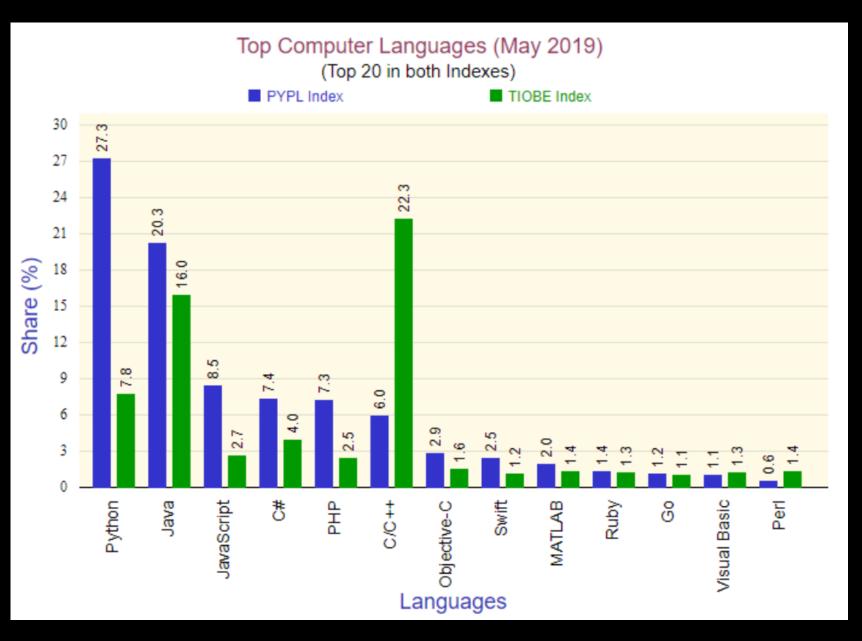
```
// include the library code:
#include <LiquidCrystal.h>
// initialize the library by associating any needed LCD interface pin
// with the arduino pin number it is connected to
const int rs = 12, en = 11, d4 = 5, d5 = 4, d6 = 3, d7 = 2;
LiquidCrystal lcd(rs, en, d4, d5, d6, d7);
void setup() {
  // set up the LCD's number of columns and rows:
  lcd.begin(16, 2);
  // Print a message to the LCD.
  lcd.print("hello, world!");
void loop() {
 // set the cursor to column 0, line 1
 // (note: line 1 is the second row, since counting begins with 0):
  lcd.setCursor(0, 1);
 // print the number of seconds since reset:
 lcd.print(millis() / 1000);
```

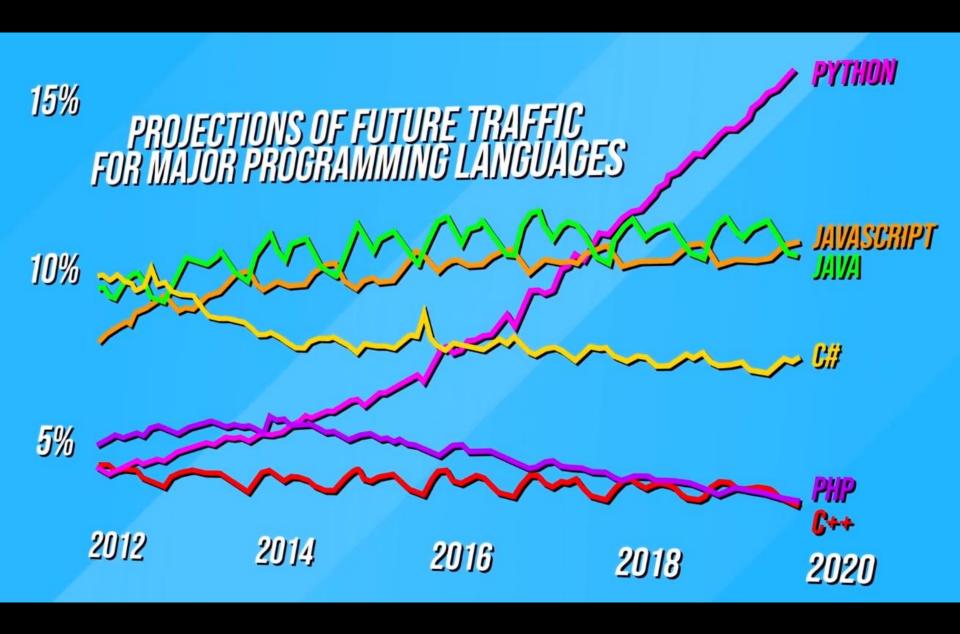
Arduino circuit with LCD

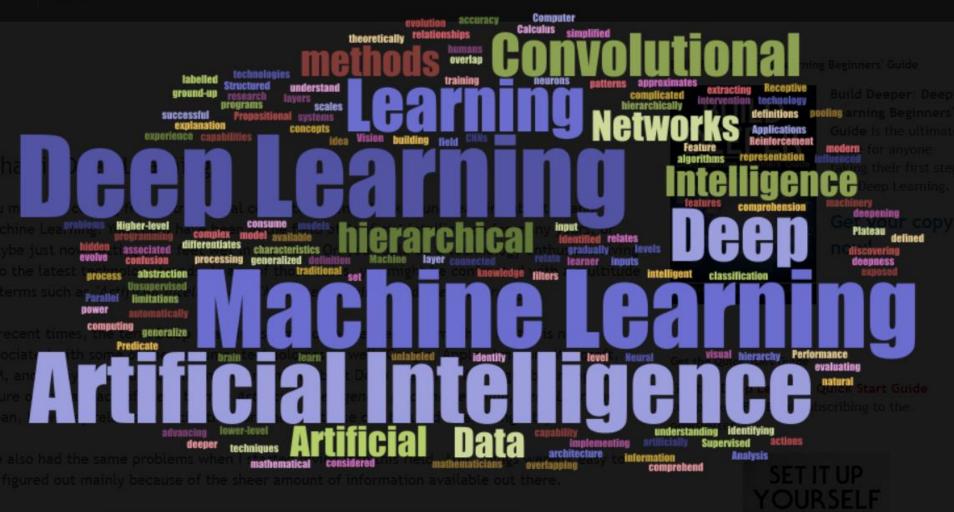


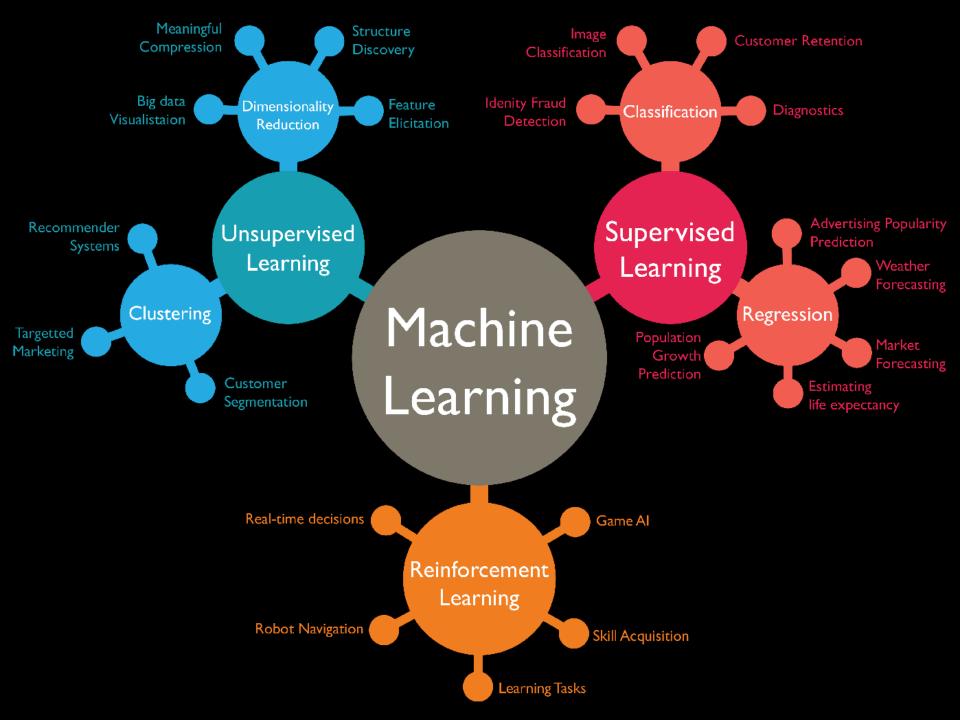
Output on LCD



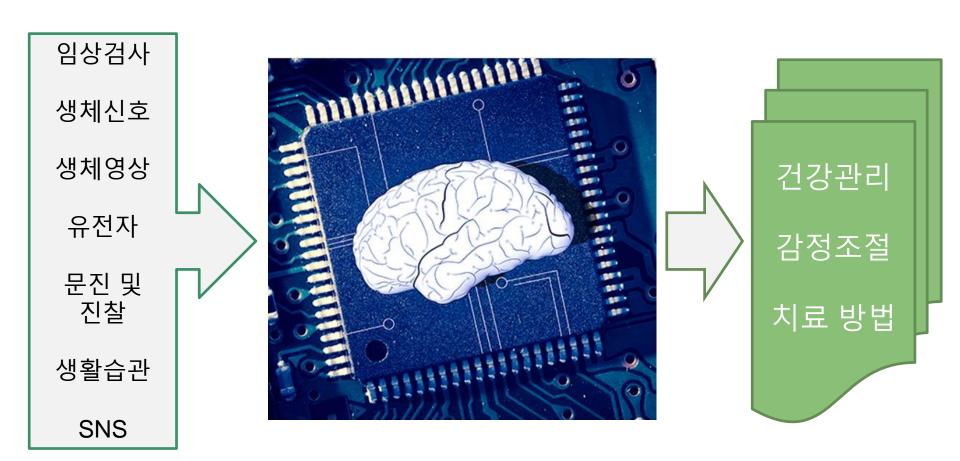








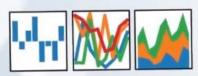
Machine(Deep) learning with brain chip



















Mobile python

● JupyterLab - Python

≡ 1

TensorFlow.js

Getting Started

Tutorials & Guides

API Reference

FAO

TRY IT LIVE!

GITHUB



A JavaScript library for training and deploying ML models in the browser and on Node.js

Develop ML with JavaScript

Use flexible and intuitive APIs to build and train models from scratch using the low-level JavaScript linear algebra library or the high-level layers API

Run Existing Models

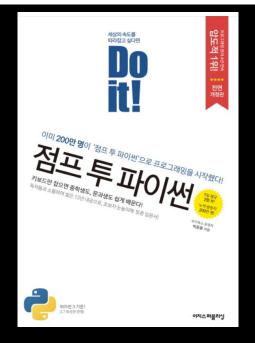
Use TensorFlow.js model converters to run pre-existing TensorFlow models right in the browser or under Node.js.

Retrain Existing Models

Retrain pre-existing ML models using sensor data connected to the browser, or other client-side data.

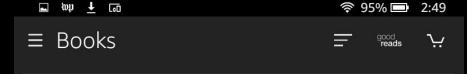
고재/참고도서

교재구분	도서명	저자명	출판사	출판년도	ISBN
주교재	Do it! 점프 투 파이썬	박응용	이지스퍼브리싱	2019	
기타자료	github.com/redwoods/py/ py2019	Redwoods Yi	github	2019	
참고도서	혼자 공부하는 파이썬	윤인성	한빛미디어	2019	
참고도서	데이터 과학을 위한 파이 썬 프로그래밍	최성철	한빛아카데미	2019	

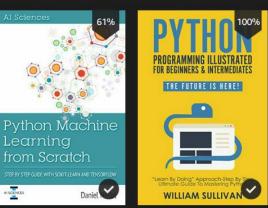


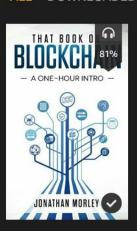


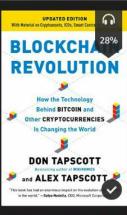


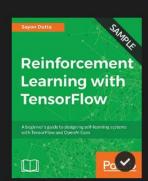


ALL DOWNLOADED

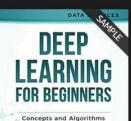






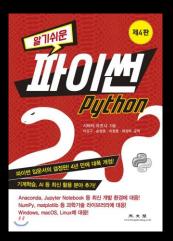






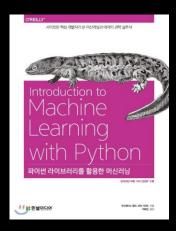






















Hands-On Deep Learning Algorithms with Python

Book

By Sudharsan Ravichandi...

512 pages Jul 2019

Understand basic-to-advanced deep learning algorithms, the mathematical principles behind them, and...

Resume



Python Machine Learning - Third Edition Book

By Sebastian Raschka, V...

770 pages Dec 2019

Applied machine learning with a solid foundation in theory. Revised and expanded for TensorFlow...

Resume



Deep Learning Quick Reference

By Mike Bernico

272 pages Mar 2018

Dive deeper into neural networks and get your models trained, optimized with this quick reference...

Resume



Deep Reinforcement Learning Hands-On -Second Edition

By Maxim Lapan

826 pages Jan 2020

New edition of the bestselling guide to deep reinforcement learning and how it's used to solve...

Resume



Hands-On Machine Learning with TensorFlow.js

By Kai Sasaki

296 pages Nov 2019

Get hands-on with the browser-based JavaScript library for training and deploying machine learning...

Resume



Intelligent Projects Using Python Book



By Santanu Pattanayak

342 pages Jan 2019

Implement machine learning and deep learning methodologies to build smart, cognitive AI projects...

Resume



Advanced Deep Learning with Python

By Ivan Vasilev

468 pages Dec 2019

Gain expertise in advanced deep learning domains such as neural networks, metalearning, graph...

Resume



Deep Learning with TensorFlow 2 and Keras - Second Edition

By Antonio Gulli, Amita...

646 pages Dec 2019

Build machine and deep learning systems with the newly released TensorFlow 2 and Keras for the...

Resume



Hands-On Deep Learning for IoT

By Dr. Mohammad Abdur R...

308 pages Jun 2019

Implement popular deep learning techniques to make your IoT applications smarter

Resume



Machine Learning Ouick Reference

By Rahul Kumar

294 pages Feb 2019

Your hands-on reference guide to developing, training, and optimizing your machine learning models

Resume



Machine Learning for Finance

Book

By Jannes Klaas

456 pages May 2019

A guide to advances in machine learning for financial professionals, with working Python code

Resume



Python Deep Learning -Second Edition

By Ivan Vasilev, Daniel...

386 pages Jan 2019

Learn advanced state-of-the-art deep learning techniques and their applications using popular...

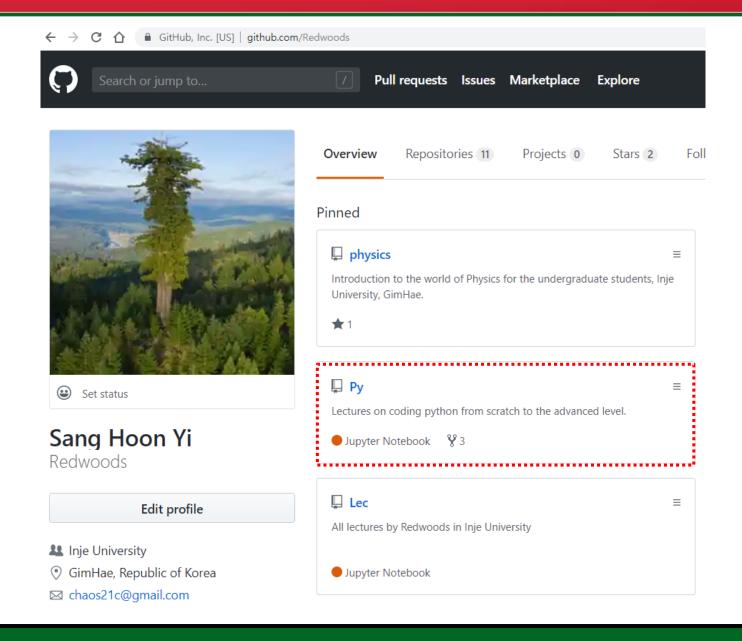
Resume

성적평가기준

평가방법	평가비율(%)
중간고사	30%
기말고사	30%
출석	15%
과제(github) 및 퀴즈	25%

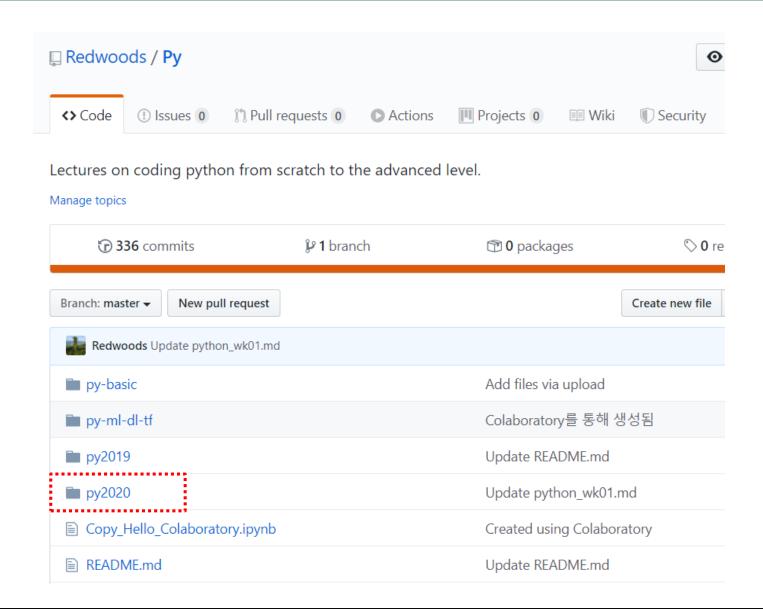


github.com/Redwoods



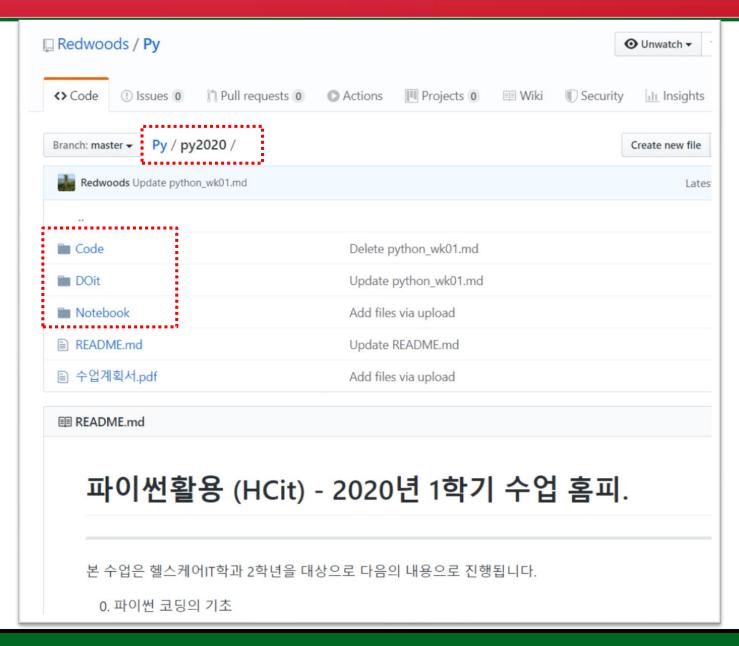


github.com/Redwoods/Py





github.com/Redwoods/py/py2020





Lecture materials

References & good sites

- <u>https://www.anaconda.com/distribution/</u> Python download
- ✓ https://code.visualstudio.com/download VSCode download
- √ http://www.github.com GitHub
- √ https://drive.google.com/drive/my-drive Google drive
- ✓ http://colab.research.google.com Colab