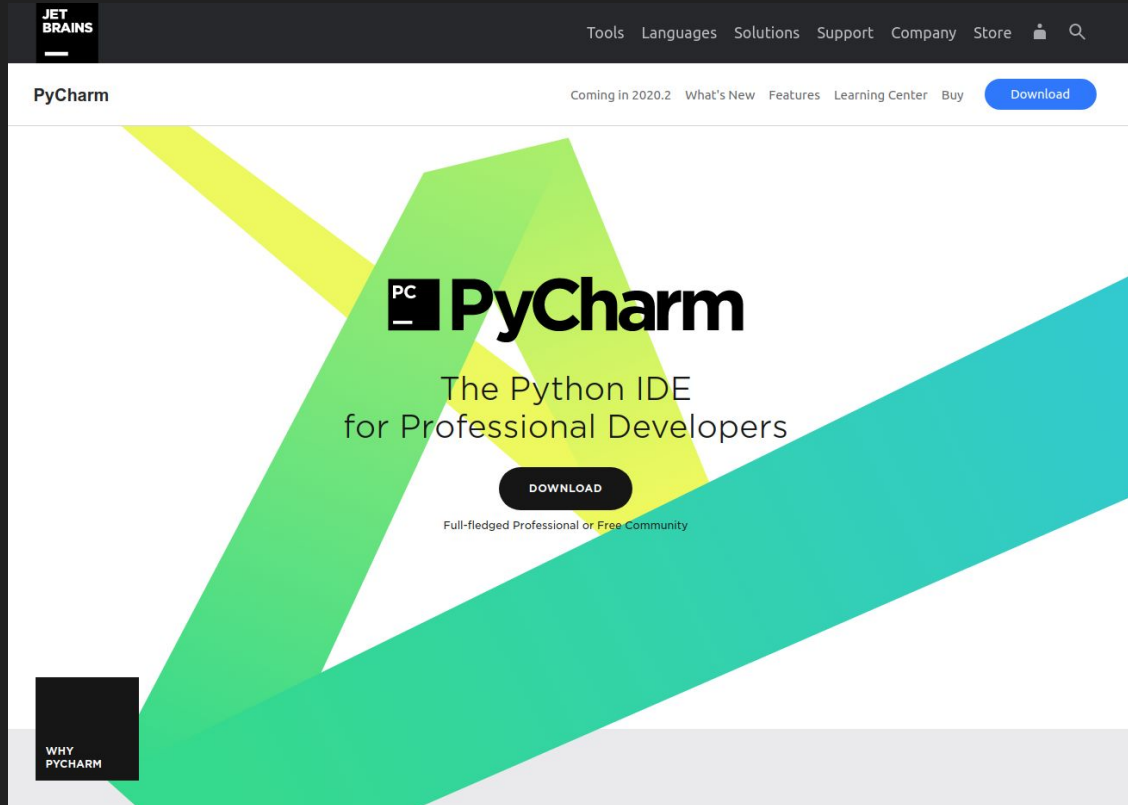


# Pycharm & Colab

Dr. Dong-Chul Kim

# Install Pycharm



The image shows a screenshot of the PyCharm website homepage. The page features a dark header with the 'JET BRAINS' logo on the left and navigation links for 'Tools', 'Languages', 'Solutions', 'Support', 'Company', 'Store', and a search icon on the right. Below the header, the 'PyCharm' logo is displayed on the left, and navigation links for 'Coming in 2020.2', 'What's New', 'Features', 'Learning Center', and 'Buy' are on the right, along with a blue 'Download' button. The main content area has a white background with large, overlapping green and yellow geometric shapes. The PyCharm logo (a black square with 'PC' and a horizontal line) is positioned to the left of the main title 'PyCharm'. Below the title is the subtitle 'The Python IDE for Professional Developers'. A dark, rounded 'DOWNLOAD' button is centered below the subtitle. Underneath the button, the text 'Full-fledged Professional or Free Community' is displayed. In the bottom left corner, there is a black square with the text 'WHY PYCHARM' in white.

JET BRAINS

Tools Languages Solutions Support Company Store

PyCharm

Coming in 2020.2 What's New Features Learning Center Buy Download

PC PyCharm

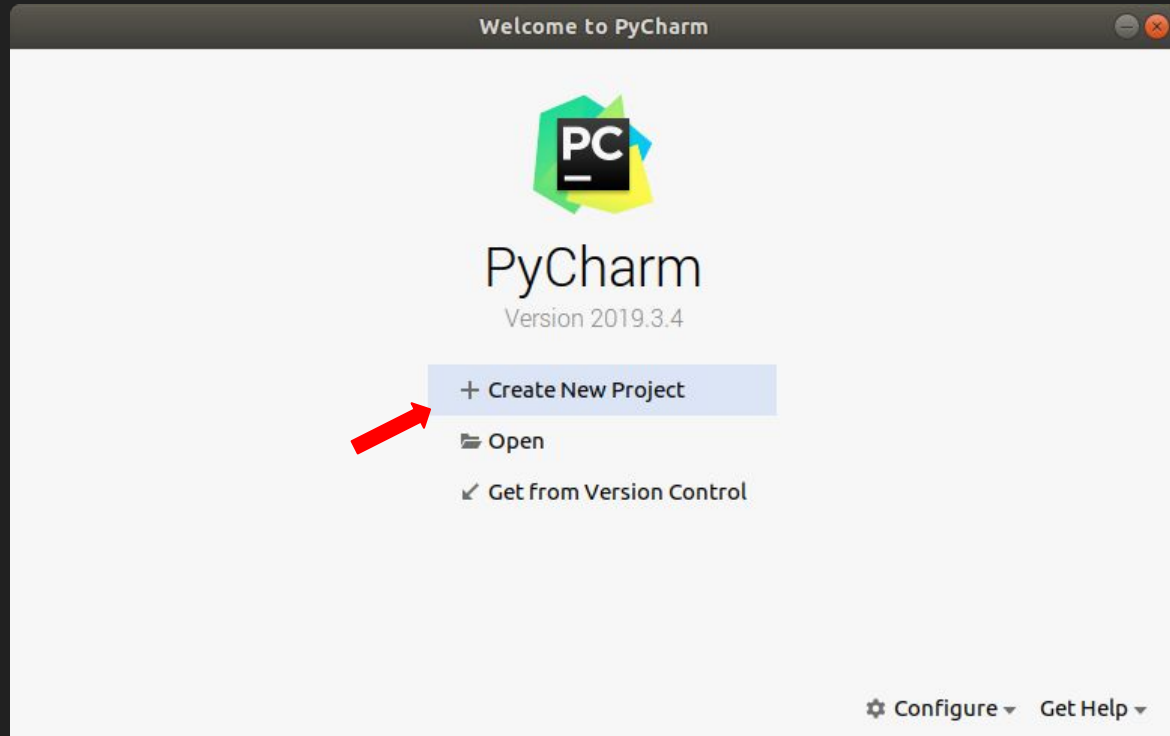
The Python IDE  
for Professional Developers

DOWNLOAD

Full-fledged Professional or Free Community

WHY PYCHARM

# Create a new project



## New Project

Location:

▼ Project Interpreter: New Virtualenv environment

New environment using

Location:

Base interpreter:

Inherit global site-packages

Make available to all projects

Existing interpreter

Interpreter:

Create

Cancel

CSCI3328

Add Configuration...

Project

- Project
- CSCI3328 ~/PycharmProjects/CSCI3328
- External Libraries
- Scratches and Consoles

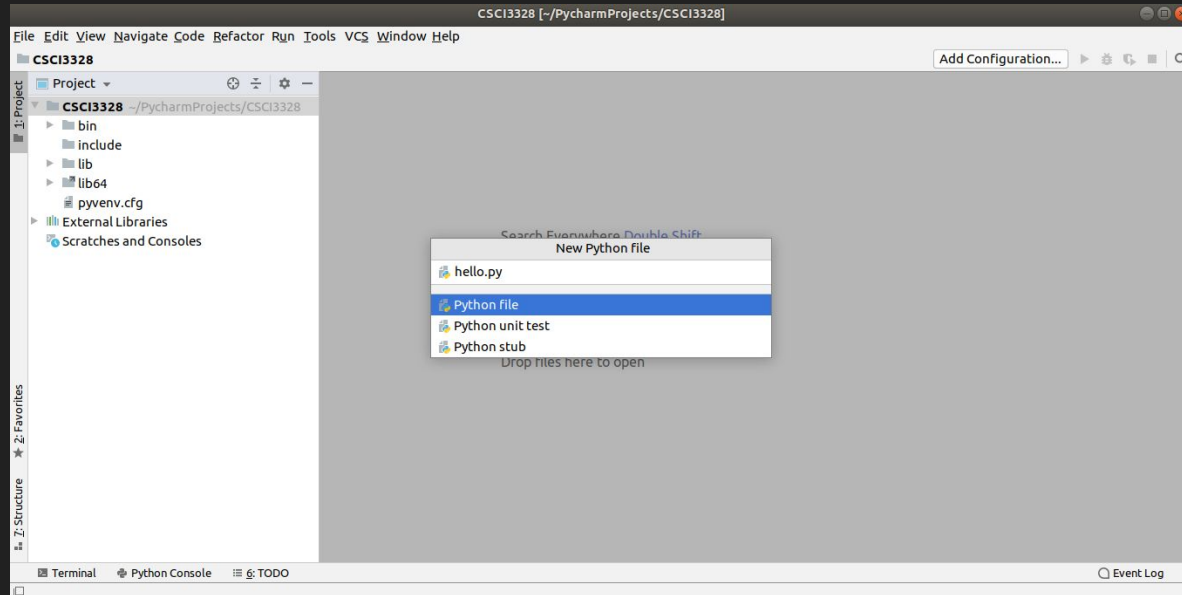
1: Project  
2: Favorites  
Z: StructureSearch Everywhere [Double Shift](#)Go to File [Ctrl+Shift+N](#)Recent Files [Ctrl+E](#)Navigation Bar [Alt+Home](#)

Drop files here to open

# Create a python file, hello.py

Go to File->New

Enter a filename, hello.py



1: Project

Project ▾

- ⊕ ⊖ ⚙ -
- hello.py ×
- 1: Project
  - ▼ CSCI3328 ~/PycharmProjects/CSCI3328
    - ▶ bin
    - ▶ include
    - ▶ lib
    - ▶ lib64
    - hello.py
    - pyenv.cfg
    - ▶ External Libraries
    - Scratches and Consoles

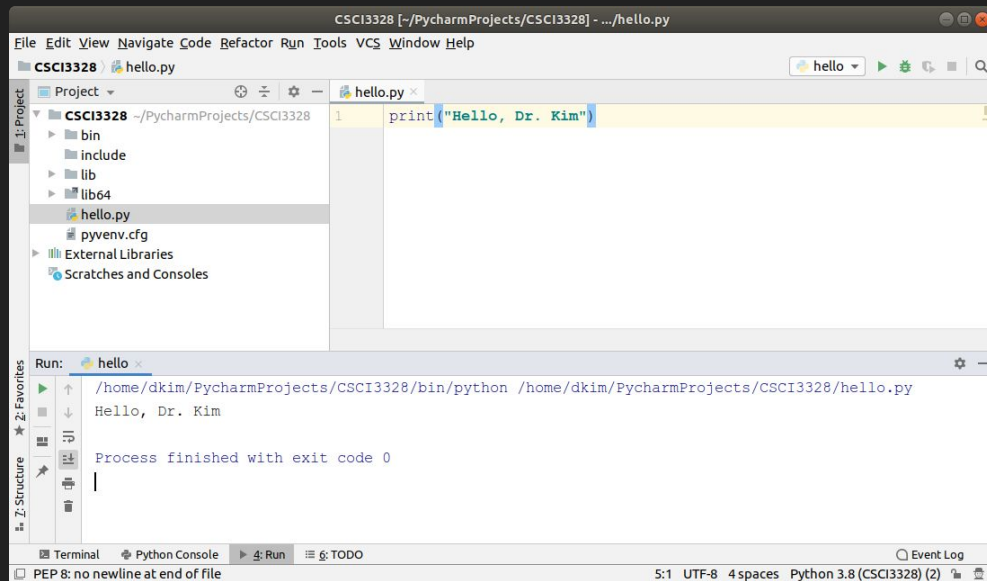
2: Favorites

Structure

```
1 print("Hello, Dr. Kim")
```

# Run hello.py

To execute your 'hello' program in PyCharm, right-click in the editor area where your code is open, and select the option 'Run 'hello'' from the context menu.





# Lab 4-1

1. Install PyCharm and create a new project with a Python file named 'hello.py'.
2. In this file, write a program to display "Hello, your\_name" on the console.
3. Capture the PyCharm window showing your code and its output, and upload this screenshot to Blackboard.
4. There is no need to upload the 'hello.py' file separately.

# Lab 4-1

PyCharm Installation and Project Setup (30 Points):

Successfully installing PyCharm and creating a new project (30 Points)

Failure to install or incorrect project setup (0 Points)

Program Creation in 'hello.py' (40 Points):

Writing a program in 'hello.py' that displays "Hello, your\_name" (40 Points)

Incomplete or incorrect program (0 Points)

Screenshot Submission (30 Points):

Submitting a clear screenshot showing both the code in PyCharm and its output (30 Points)

Incomplete, unclear, or incorrect screenshot (0 Points)

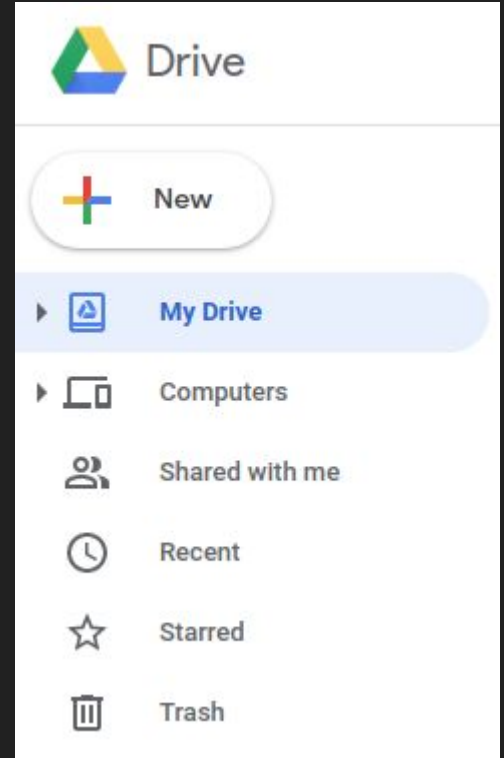
Total Points: 100

# Google Colab

To use Google Colab, you must have a Google account. Log into your Google account and navigate to Google Drive.

Click the 'New' button, select 'More', and then choose 'Google Colaboratory'.

If Google Colaboratory isn't listed, follow the installation instructions on the next slide.



# Installing Google Colaboratory in Google Drive

To install Google Colaboratory in Google Drive, log into your Google Drive account. Click on 'New', then 'More', and look for 'Google Colaboratory'.

1. If it's not listed, click on 'Connect more apps'.
2. In the search box, type 'Google Colaboratory'.
3. Once you find the app, click on '+ Connect' to add it to your Google Drive.
4. After this, Google Colaboratory will be available for use in your Google Drive.



Untitled1.ipynb ☆

File Edit View Insert Runtime Tools Help [All changes saved](#)

Comment

Share



+ Code + Text

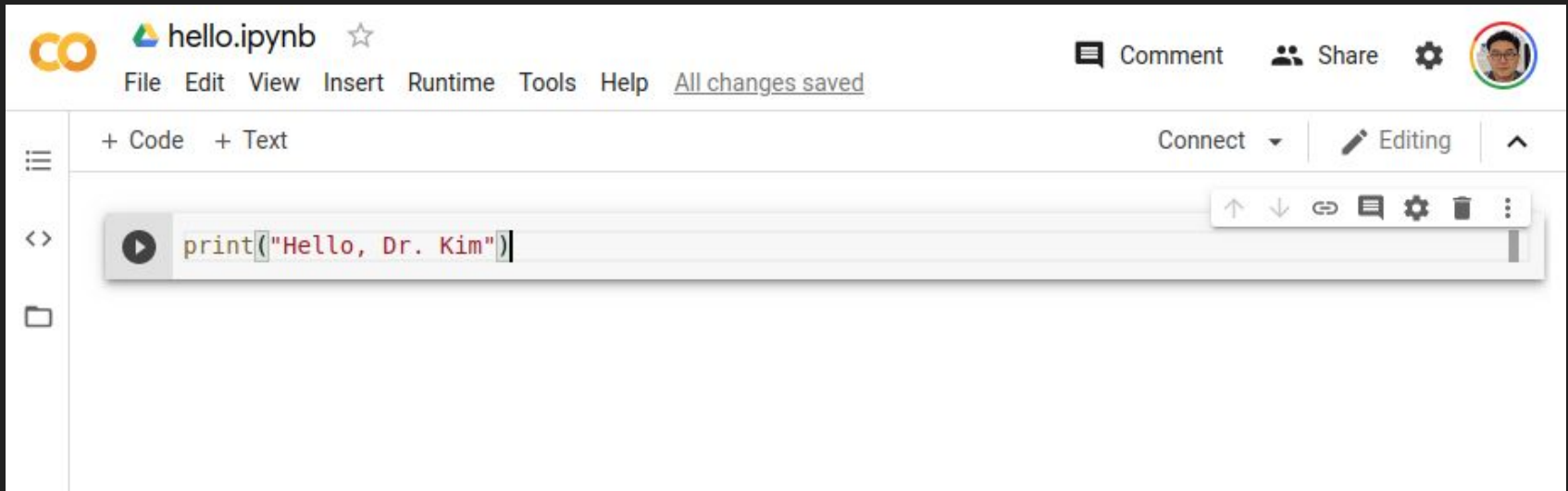
Connect ▾

Editing



# Google Colab

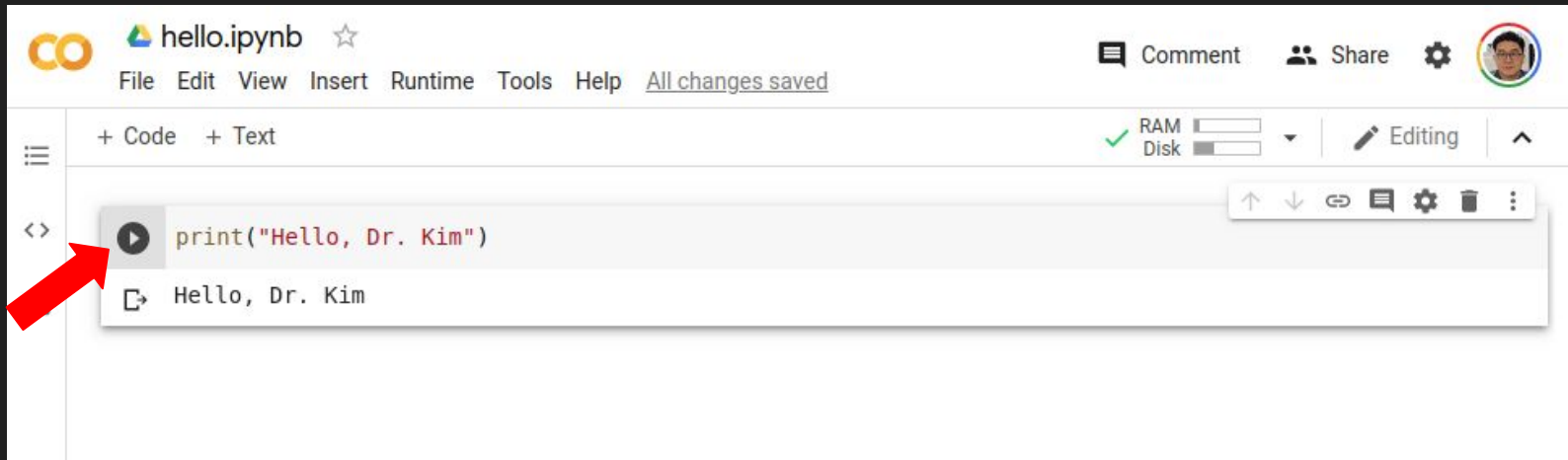
Rename the file to 'hello.jpynb' and include a single line of code to print a your name.



The screenshot displays the Google Colab interface. At the top left, the Colab logo is followed by the file name 'hello.ipynb' and a star icon. A menu bar includes 'File', 'Edit', 'View', 'Insert', 'Runtime', 'Tools', and 'Help', with a status indicator 'All changes saved'. On the right side of the top bar, there are icons for 'Comment', 'Share', a settings gear, and a user profile picture. Below the top bar, the notebook editor shows a code cell. The cell header includes '+ Code' and '+ Text' on the left, and 'Connect', 'Editing', and an upward arrow on the right. The code cell contains a single line of Python code: `print("Hello, Dr. Kim")`. A toolbar with various icons (up, down, link, comment, settings, trash, and more) is visible above the code cell.

# Run hello.ipynb

Click the play button 



The screenshot shows a Jupyter Notebook interface for a file named "hello.ipynb". The top navigation bar includes "File", "Edit", "View", "Insert", "Runtime", "Tools", and "Help", with a status message "All changes saved". On the right, there are options for "Comment", "Share", and a user profile icon. Below the navigation bar, there are tabs for "+ Code" and "+ Text", and a status bar showing "RAM" and "Disk" usage, along with an "Editing" mode indicator. The main area contains a code cell with the code `print("Hello, Dr. Kim")`. A red arrow points to the play button icon on the left side of the code cell. Below the code cell, the output "Hello, Dr. Kim" is displayed. A context menu is visible on the right side of the code cell, containing icons for up, down, link, comment, settings, delete, and a three-dot menu.

# Lab 4-2

1. Create a 'hello.jpynb' notebook on Google Colab.
2. Write and execute a Python program within the notebook to display "Hello, your\_name".
3. Capture a screenshot of your Google Chrome browser while the program is running and upload it to Blackboard.
4. There's no need to upload the 'hello.jpynb' file separately.



# Lab 4-2

Creation of 'hello.jpynb' Notebook (30 Points):

Successfully creating a 'hello.jpynb' notebook on Google Colab (30 Points)

Failure to create or incorrect notebook name (0 Points)

Program Execution in Notebook (40 Points):

Writing and executing a Python program in the notebook to display "Hello, your\_name" (40 Points)

Incomplete or incorrect program execution (0 Points)

Screenshot Submission (30 Points):

Submitting a clear screenshot of the Google Chrome browser showing the notebook with the program and its output (30 Points)

Incomplete, unclear, or incorrect screenshot (0 Points)

Total Points: 100