Introduction to Python

What is Python?

1. A very high level, object oriented language.
2.Python is programming language, which is widely use in the world.
3.Easy to read and program with Similar to Perl but with powerful typing and object oriented features
4. scripting Language.

Python Features

- 1) Easy to Learn and Use
- 2) Expressive Language
- 3) Interpreted Language
- 4) Cross-platform Language/portable language
- 5) Free and Open Source
- 6) Object-Oriented Language
- 7) Extensible
- 8) Large Standard Library
- 9) GUI Programming Support
- 10) Integrated

APPLICATIONS OF PYTHON

- Easy-to-learn
- Easy-to-read
- Easy-to-maintain
- A broad standard library
- Interactive Mode
- Portable
- Extendable
- Databases
- GUI Programming
- Scalable

Users of Python

- **YouTube:** originally written in python and MySQL
- **Yahoo!:** Yahoo acquired Four11, whose address and mapping lookup services are implemented in Python
- **Yahoo! Maps:** Uses Python
- **Drop Box:** A cloud based file hosting service runs on python
- **Google:** Many components of the Google spider and search engine are written in Python

Organizations Using Python

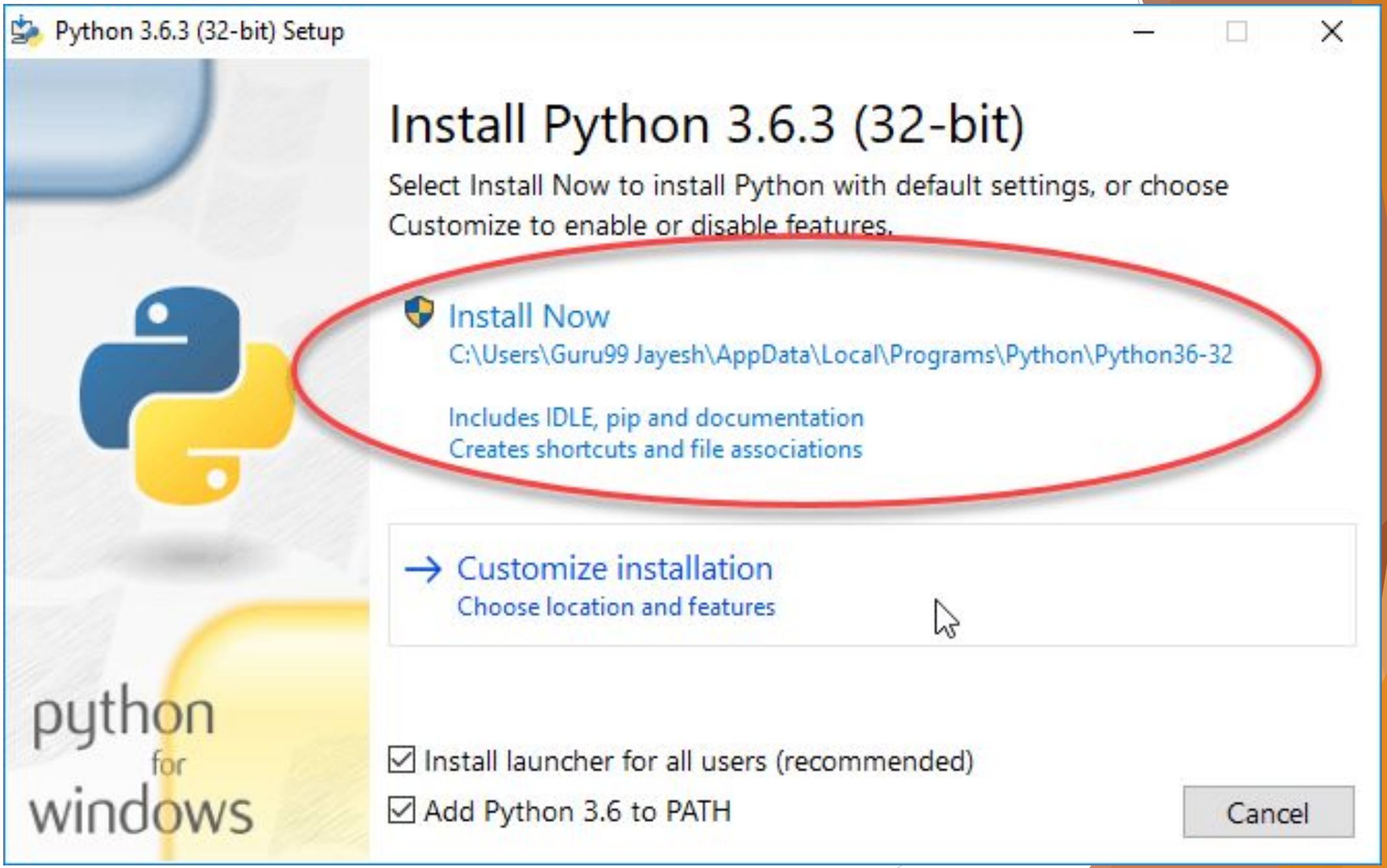
- **Web Development :** Yahoo Maps, Yahoo Groups, Google,
- **Games:** Battlefield 2, Crystal Space, Star Trek Bridge Commander.
- **Graphics :** Industrial Light & Magic, Walt Disney Feature Animation .
- **Financial :** Altis Investment Management, ABN AMRO Bank, Treasury Systems.
- **Science :** National Weather Service, Radar Remote Sensing Group, Applied Maths, Biosoft, The National Research Council of Canada, Environmental Systems Research Institute (ESRI)
- **Electronic Design Automation:** Object Domain, Pardus, Red Hat, SGI, Inc., MCI Worldcom, Nokia,
- **Education :** University of California, Smeal College of Business, New Zealand Digital Library, IT Certification Exam preparation, SchoolTool,
- **Business Software :** Raven Bear Systems Corporation, Thaw

Python Installation and Configuration

The IDE's are::

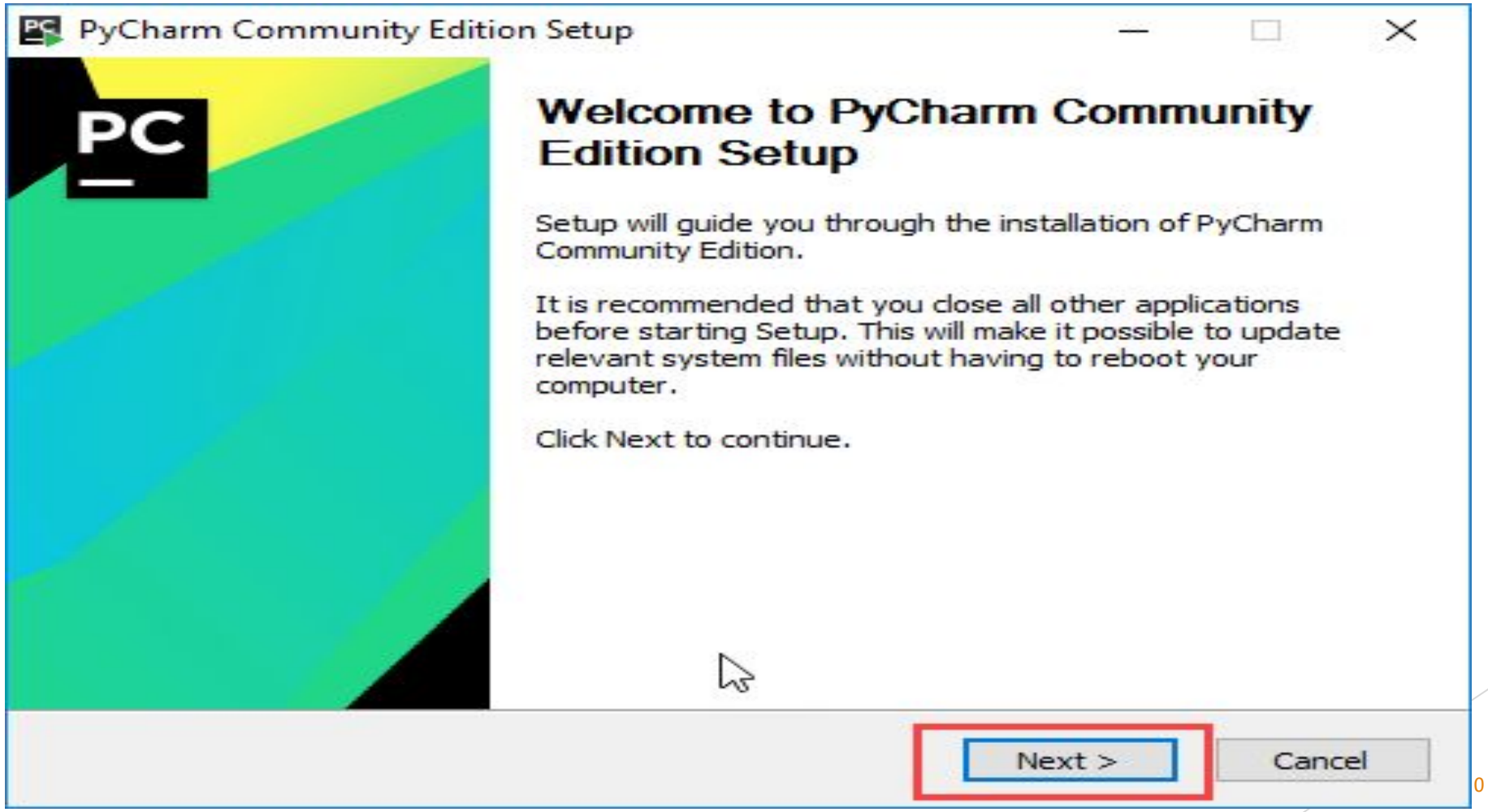
- PyCharm
- Spyder
- Jupiter

Python Installation


Python 3.6.3 (32-bit) Setup
Install Python 3.6.3 (32-bit)
Select Install Now to install Python with default settings, or choose
Customize to enable or disable features.
Install Now
C:\Users\Guru99 Jayesh\AppData\Local\Programs\Python\Python36-32
Includes IDLE, pip and documentation
Creates shortcuts and file associations
Customize installation
Choose location and features
python
for
windows
Install launcher for all users (recommended)
Add Python 3.6 to PATH
Cancel

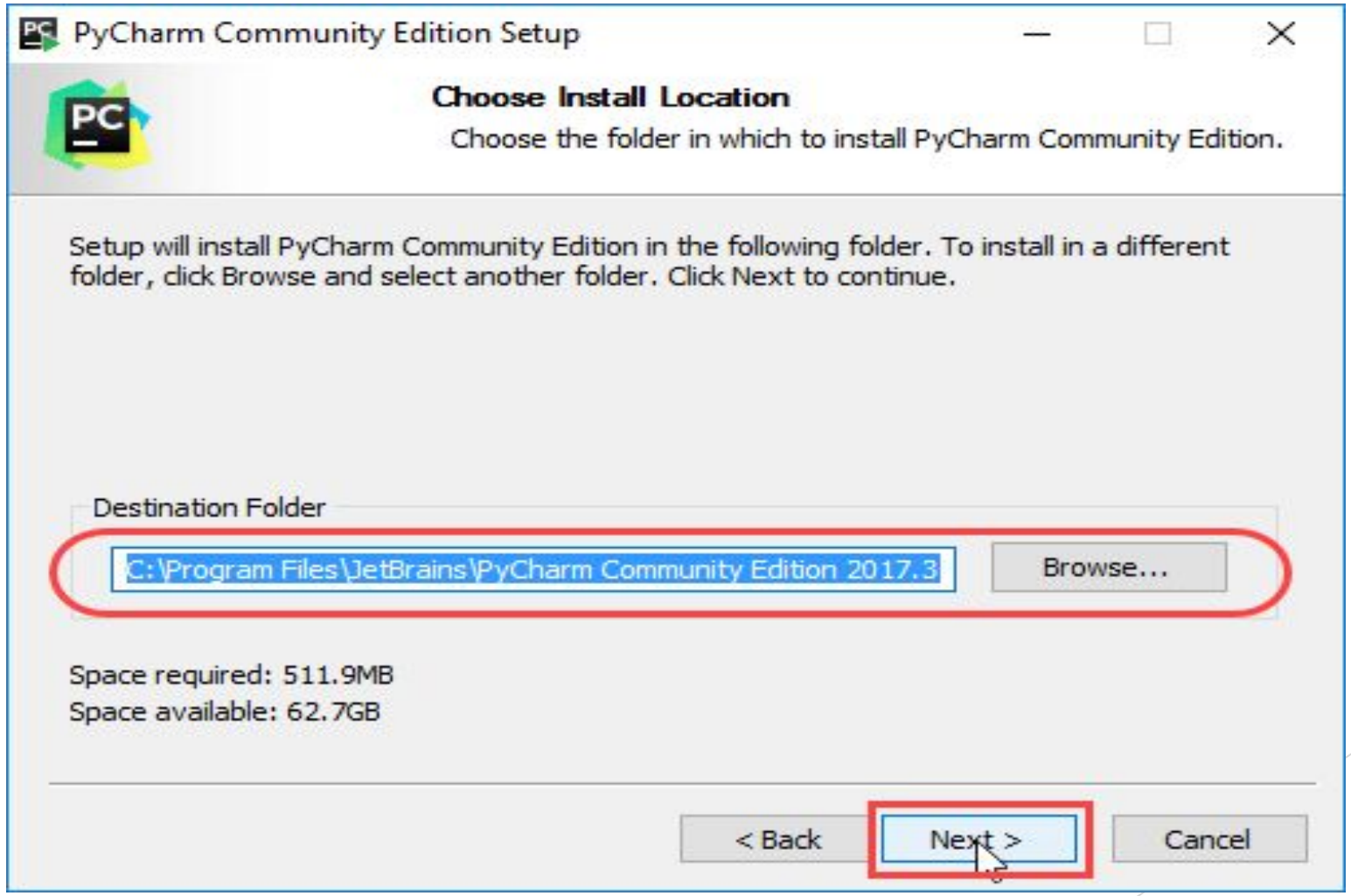
INSTALLING PYCHARM

STEP 1) TO DOWNLOAD PYCHARM VISIT THE WEBSITE https://www.jetbrains.com/pycharm/download/ and Click the "DOWNLOAD" link under the Community Section.

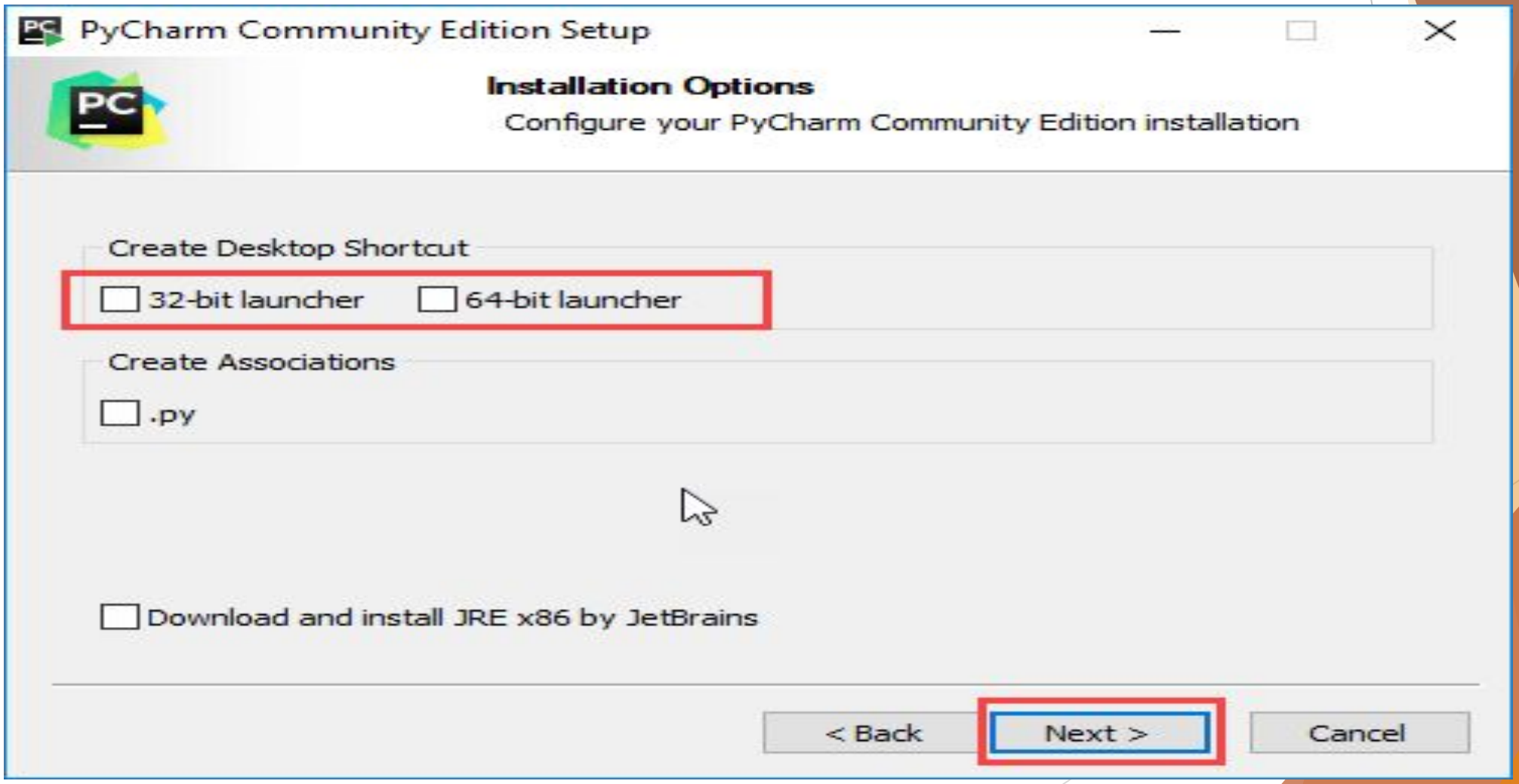


Step 2) once the download is complete, run the exe for install PyCharm. The setup wizard should have started. Click “Next”.

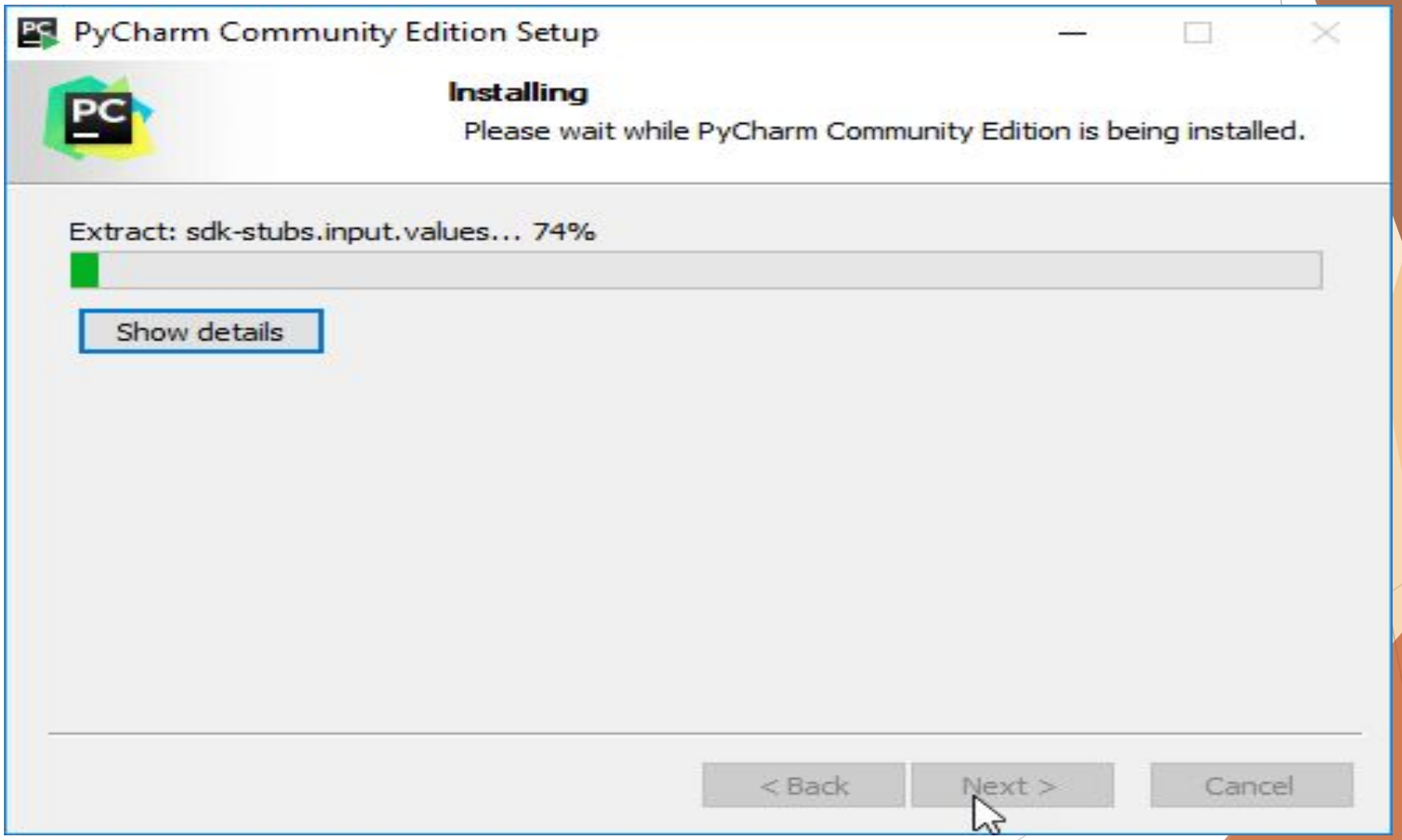
Step 3) on the next screen, Change the installation path if required. Click “Next”.



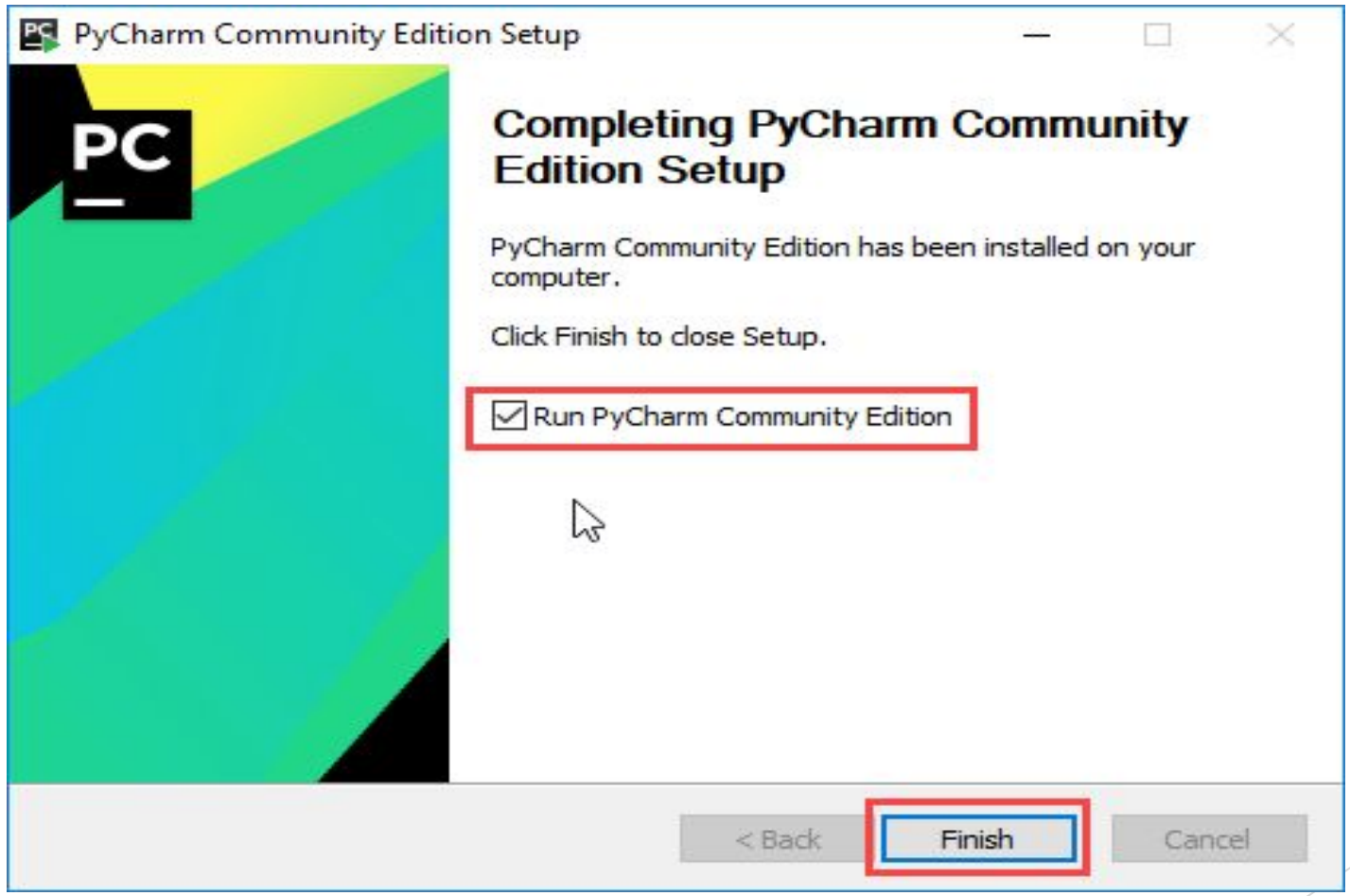
Step 4) on the next screen, you can create a desktop shortcut if you want and click on “Next”.



Step 6) Wait for the installation to finish



Step 7) once installation finished, you should receive a message screen that PyCharm is installed. If you want to go ahead and run it, click the “Run PyCharm Community Edition” box first and click “Finish”.



Python provides us the feature to execute the python statement one by one at the interactive prompt.