


Aula 15

Curso de Lógica de Programação

Júnior Gonçalves

- 
- ✓ Lógica
 - ✓ Programação
 - ✓ Algoritmos
 - ✓ Variáveis
 - ✓ Condicionais
 - ✓ Pseudocódigo

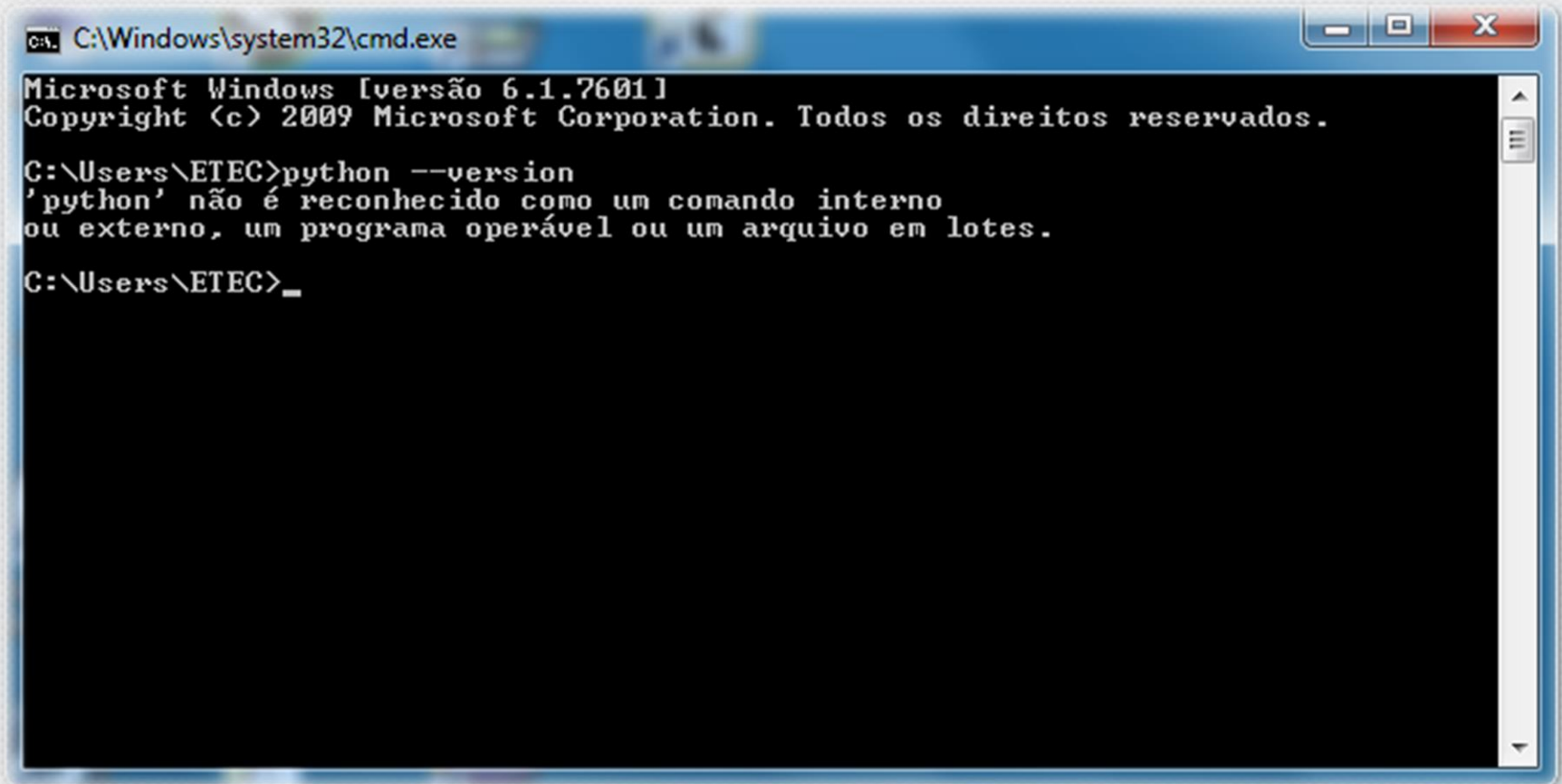


python

Sobre o Python

- Criada em 1989 por Guido van Rossum na Holanda
- Linguagem de propósito geral multiplataforma
- Python Software Foundation – Versão 3.9.6
- Quem usa: Nasa, IBM, Banco do Brasil, Google, Uber, Spotify, Globo.com, Civilization, Battlefield.
- <https://www.python.org/>

Instalação do Python



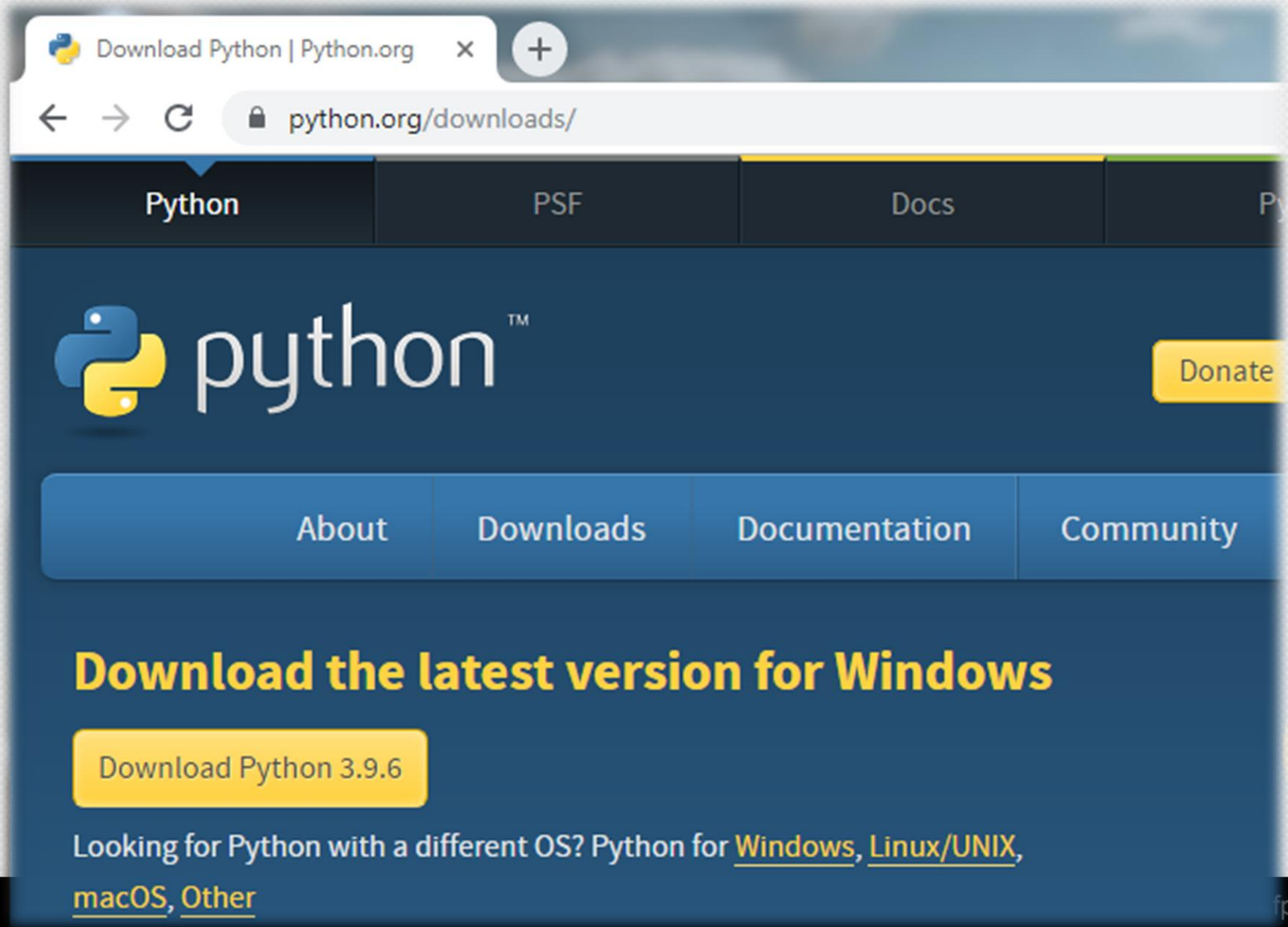
```
C:\Windows\system32\cmd.exe
Microsoft Windows [versão 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. Todos os direitos reservados.

C:\Users\ETEC>python --version
'python' não é reconhecido como um comando interno
ou externo, um programa operável ou um arquivo em lotes.

C:\Users\ETEC>_
```

No prompt de comando: `python --version`

Instalação do Python



A screenshot of a web browser displaying the Python.org download page. The browser's address bar shows the URL 'python.org/downloads/'. The page features a dark blue header with the Python logo and the word 'python' in white. Below the header is a navigation bar with links for 'About', 'Downloads', 'Documentation', and 'Community'. A prominent yellow button labeled 'Download Python 3.9.6' is visible. The page also includes a 'Donate' button and a section for downloading the latest version for Windows. At the bottom, there is a link to download Python for other operating systems.

Download Python | Python.org

python.org/downloads/

Python PSF Docs Py

python™

Donate

About Downloads Documentation Community

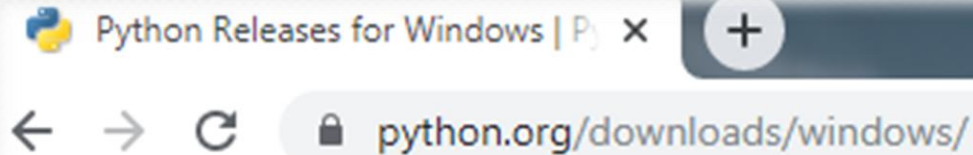
Download the latest version for Windows

Download Python 3.9.6

Looking for Python with a different OS? Python for [Windows](#), [Linux/UNIX](#), [macOS](#), [Other](#)

fppt.com

Instalação do Python



- [Python 3.8.10 - May 3, 2021](#)

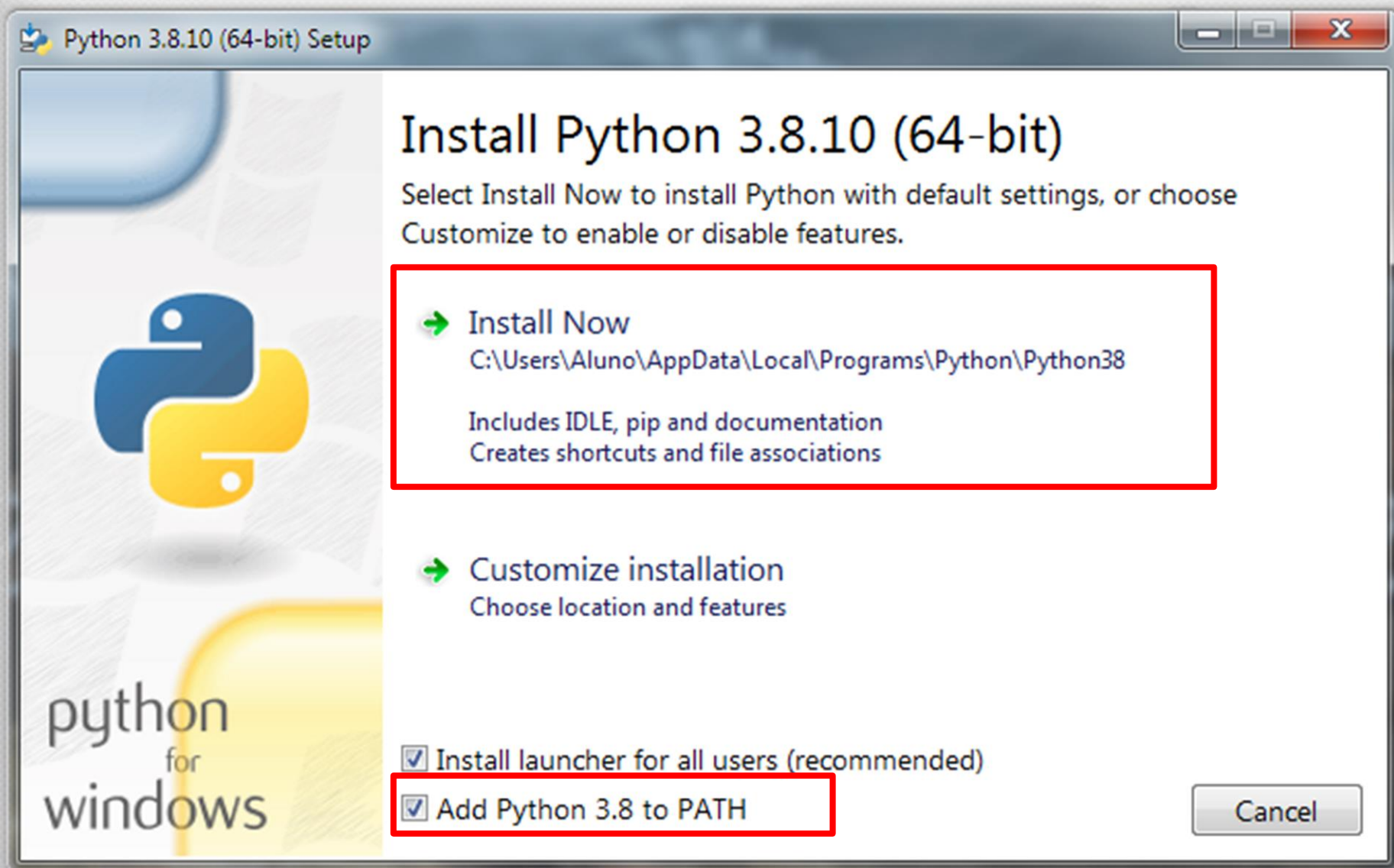
Note that Python 3.8.10 *cannot* be used on Windows XP or earlier.

- Download [Windows embeddable package \(32-bit\)](#)
- Download [Windows embeddable package \(64-bit\)](#)
- Download [Windows help file](#)
- Download [Windows installer \(32-bit\)](#)
- Download [Windows installer \(64-bit\)](#)

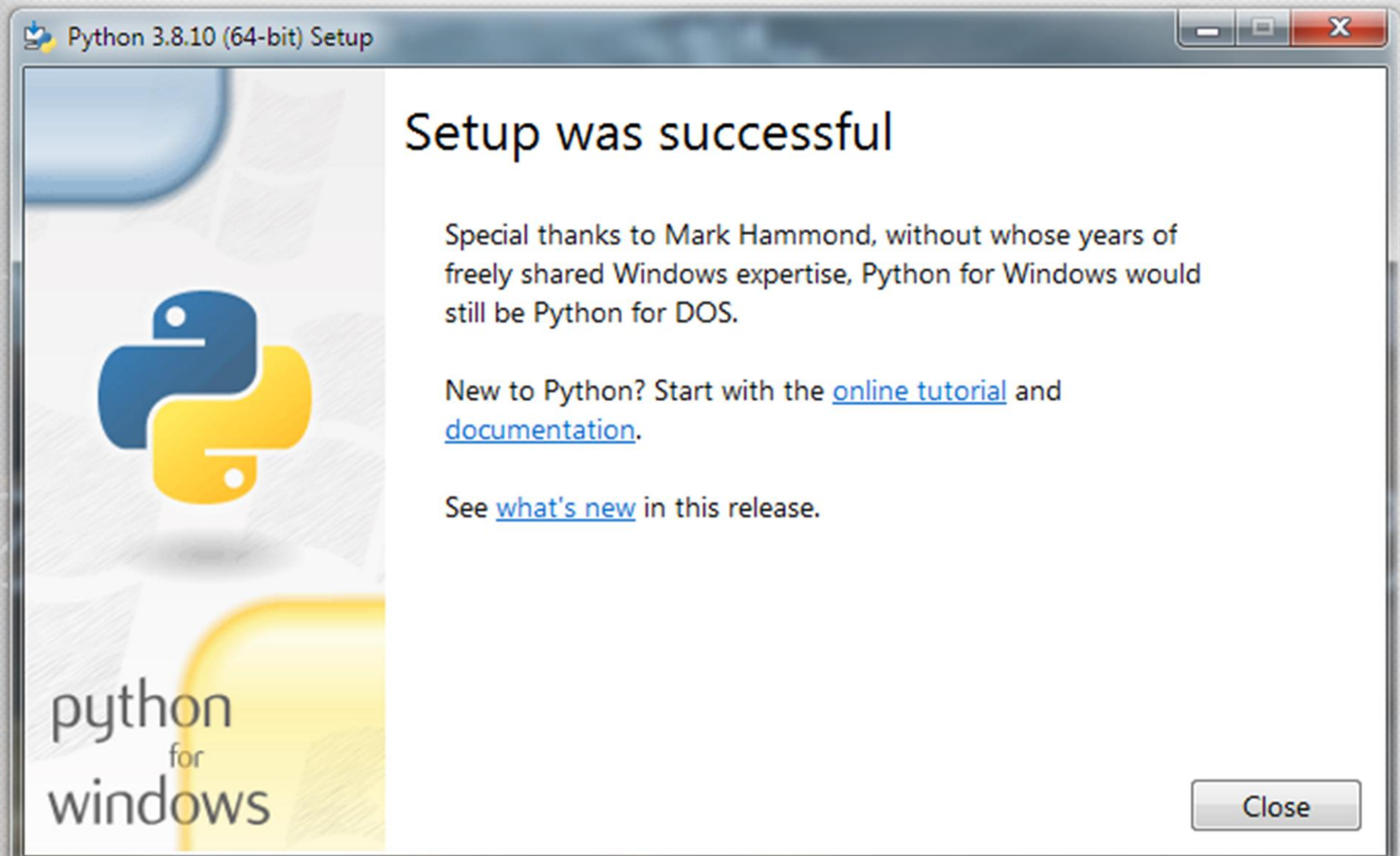
- [Python 3.9.4 - April 4, 2021](#)

Note that Python 3.9.4 *cannot* be used on Windows 7 or earlier.

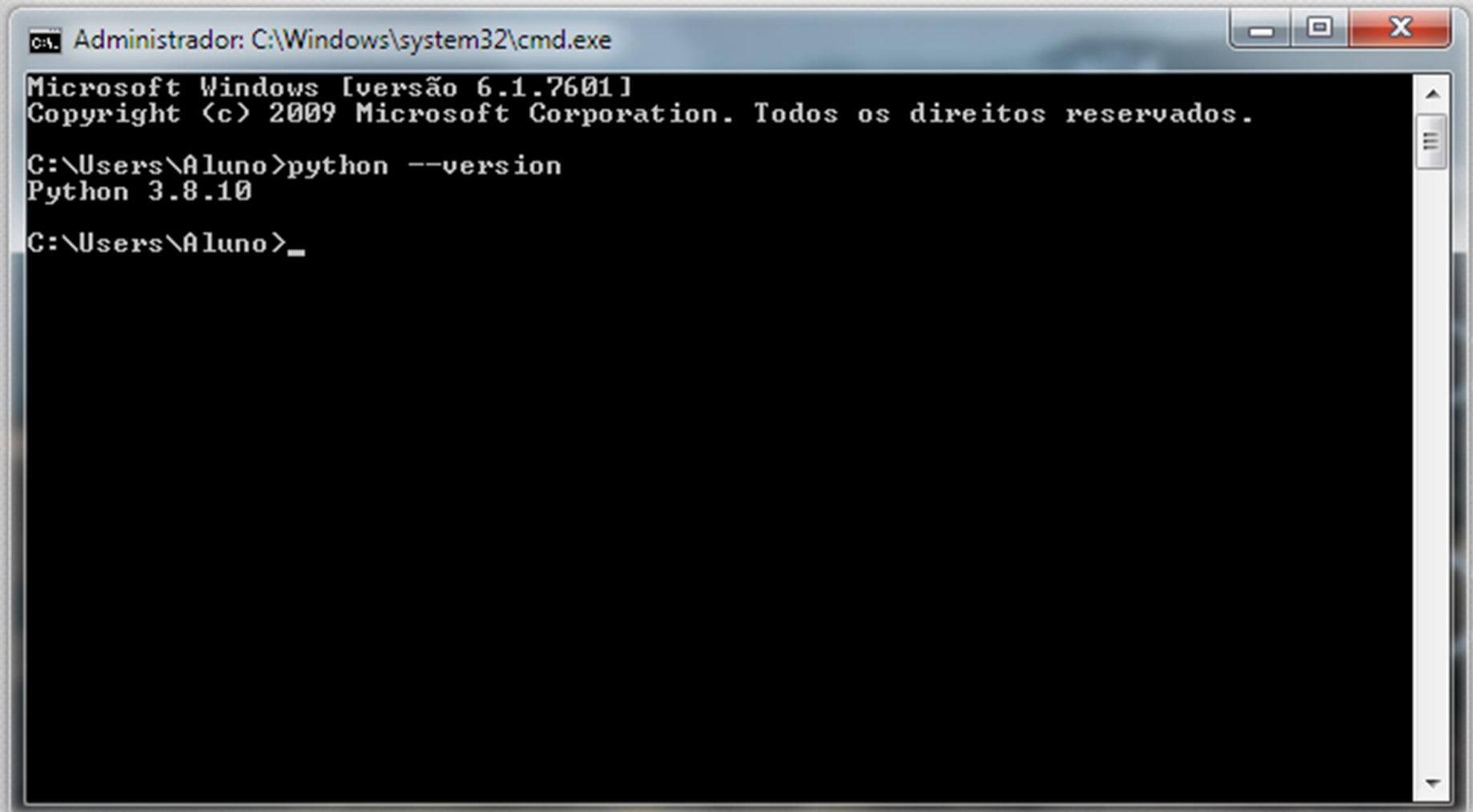
Instalação do Python



Instalação do Python



Instalação do Python



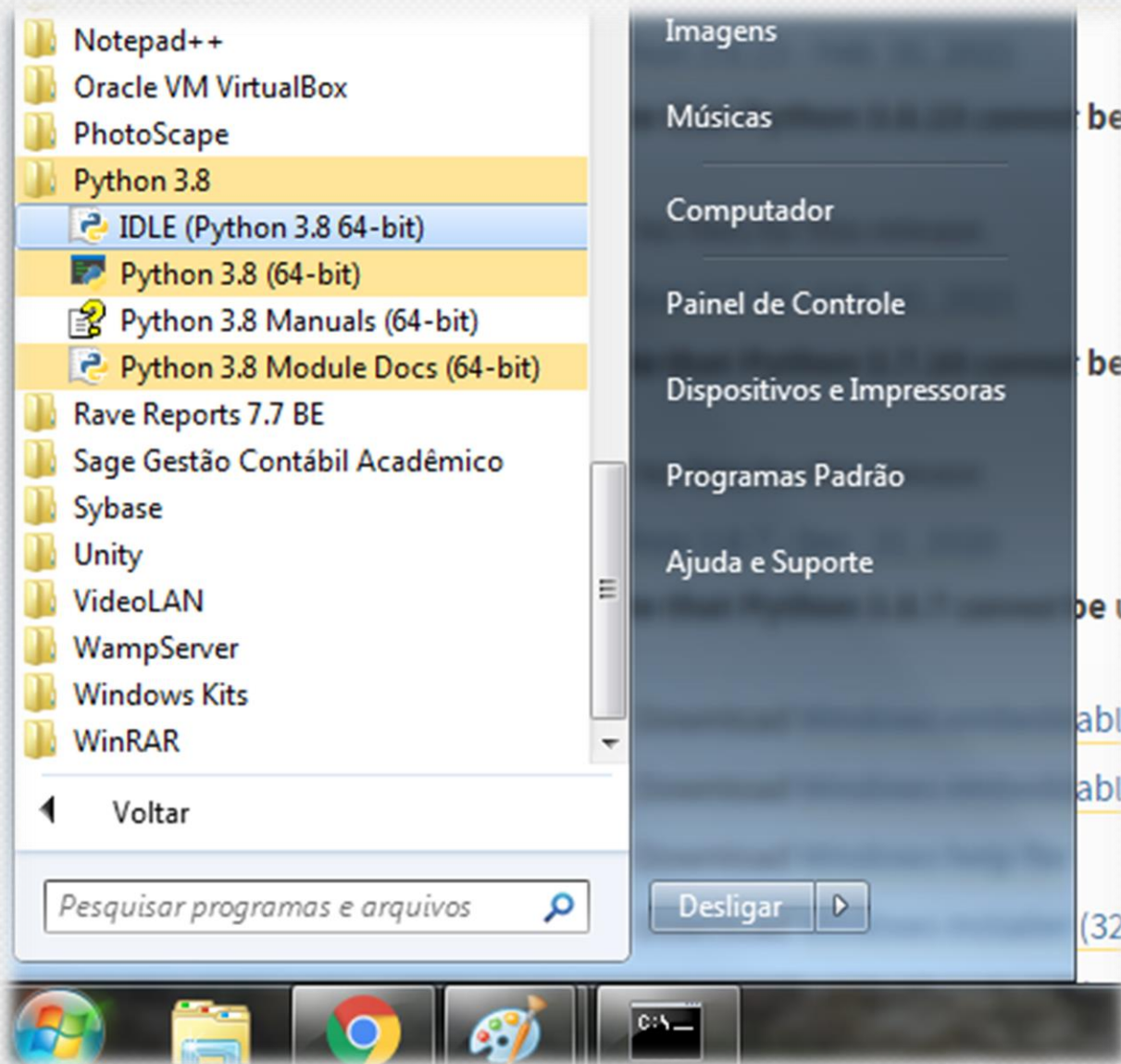
A screenshot of a Windows Command Prompt window. The title bar reads "Administrador: C:\Windows\system32\cmd.exe". The window contains the following text: "Microsoft Windows [versão 6.1.7601] Copyright (c) 2009 Microsoft Corporation. Todos os direitos reservados." followed by the command "C:\Users\Aluno>python --version" and its output "Python 3.8.10". The prompt "C:\Users\Aluno>_" is visible at the bottom.

```
Administrador: C:\Windows\system32\cmd.exe
Microsoft Windows [versão 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. Todos os direitos reservados.

C:\Users\Aluno>python --version
Python 3.8.10

C:\Users\Aluno>_
```

Instalação do Python



Como programar em Python

A MALDICAÇÃO DO OLÁ MUNDO

IDLE Shell 3.9.6

File Edit Shell Debug Options Window Help

Python 3.9.6 (tags/v3.9.6:db3ff76, AMD64) on win32

Type "help", "copyright", "credits"

```
>>> print('Olá Mundo!')
```

```
Olá Mundo!
```

```
>>> |
```

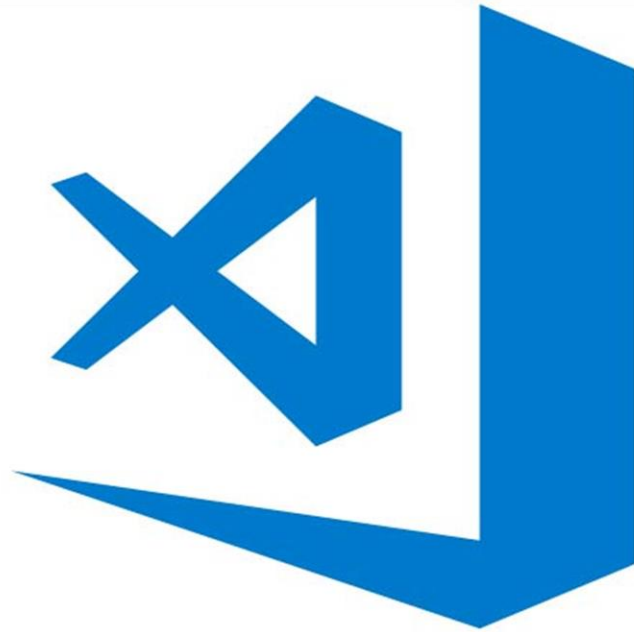
Como programar em Python

Sistema Operacional:

- ✓ Windows, Linux ou Mac

Editores de código:

- ✓ IDLE
- ✓ Notepad++
- ✓ Sublime
- ✓ PyCharm
- ✓ **VS Code**

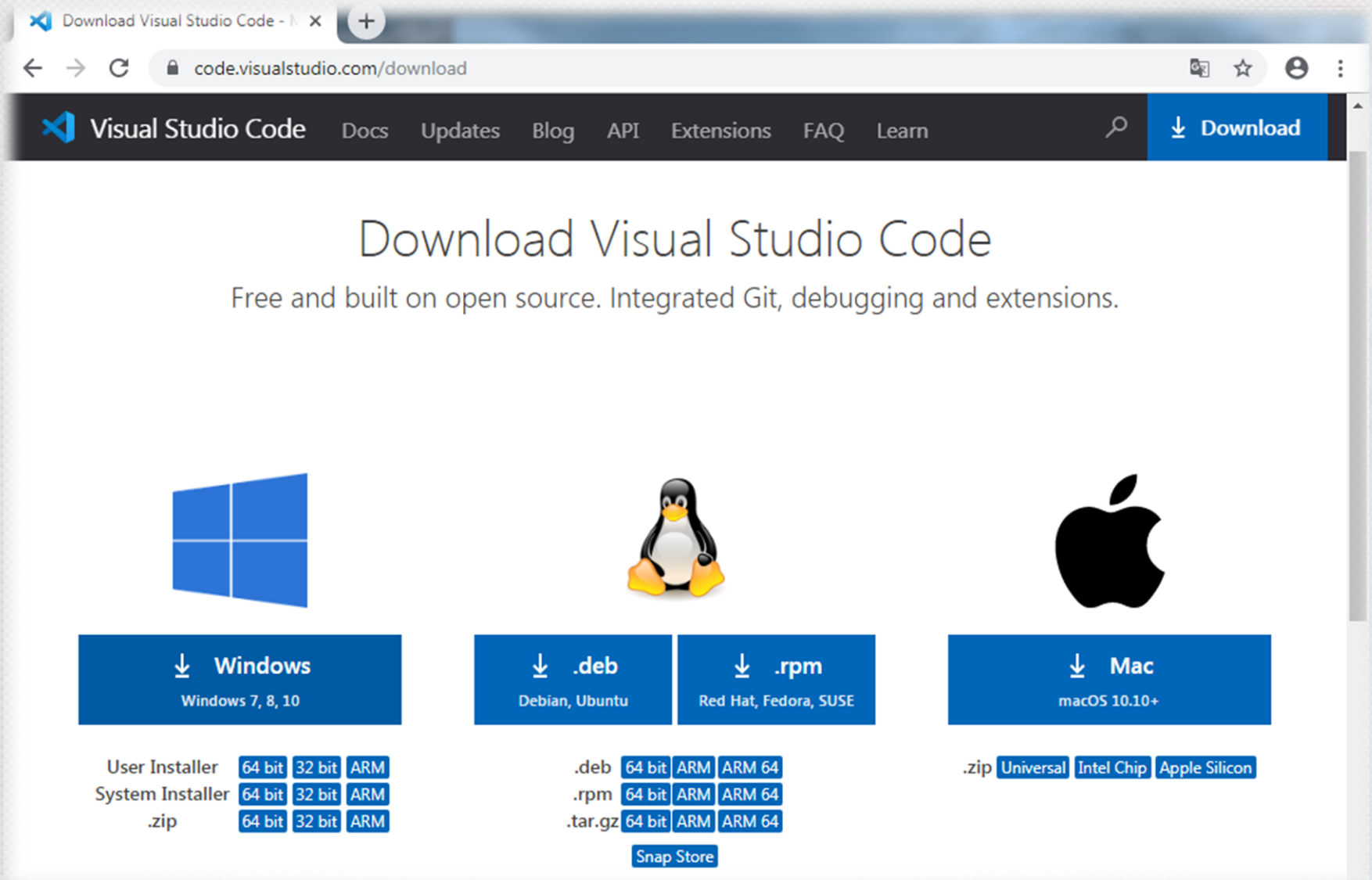


Visual Studio Code

Sobre o VS Code

- Visual Studio Code
- Microsoft em 2015
- Editor de código de múltiplas linguagens
- Plugins que adicionam novas funcionalidade

Instalação do VS Code



The screenshot shows the Visual Studio Code download page in a web browser. The browser's address bar shows the URL `code.visualstudio.com/download`. The page features a dark navigation bar with the Visual Studio Code logo and links to Docs, Updates, Blog, API, Extensions, FAQ, and Learn. A prominent blue 'Download' button is on the right. The main content area has the heading 'Download Visual Studio Code' and the tagline 'Free and built on open source. Integrated Git, debugging and extensions.' Below this, three platform-specific sections are displayed: Windows (with the Windows logo), Linux (with the Tux penguin logo), and Mac (with the Apple logo). Each section contains a blue button with a download icon and the platform name. Under the Windows button, there are links for 'User Installer', 'System Installer', and '.zip', each with sub-links for '64 bit', '32 bit', and 'ARM'. Under the Linux section, there are buttons for '.deb' (Debian, Ubuntu) and '.rpm' (Red Hat, Fedora, SUSE), with sub-links for '64 bit', 'ARM', and 'ARM 64'. A '.tar.gz' link is also present. A 'Snap Store' button is at the bottom. The Mac section has a button for '.zip' with sub-links for 'Universal', 'Intel Chip', and 'Apple Silicon'.

Download Visual Studio Code

Free and built on open source. Integrated Git, debugging and extensions.

Windows
Windows 7, 8, 10

User Installer: 64 bit, 32 bit, ARM
System Installer: 64 bit, 32 bit, ARM
.zip: 64 bit, 32 bit, ARM

.deb
Debian, Ubuntu

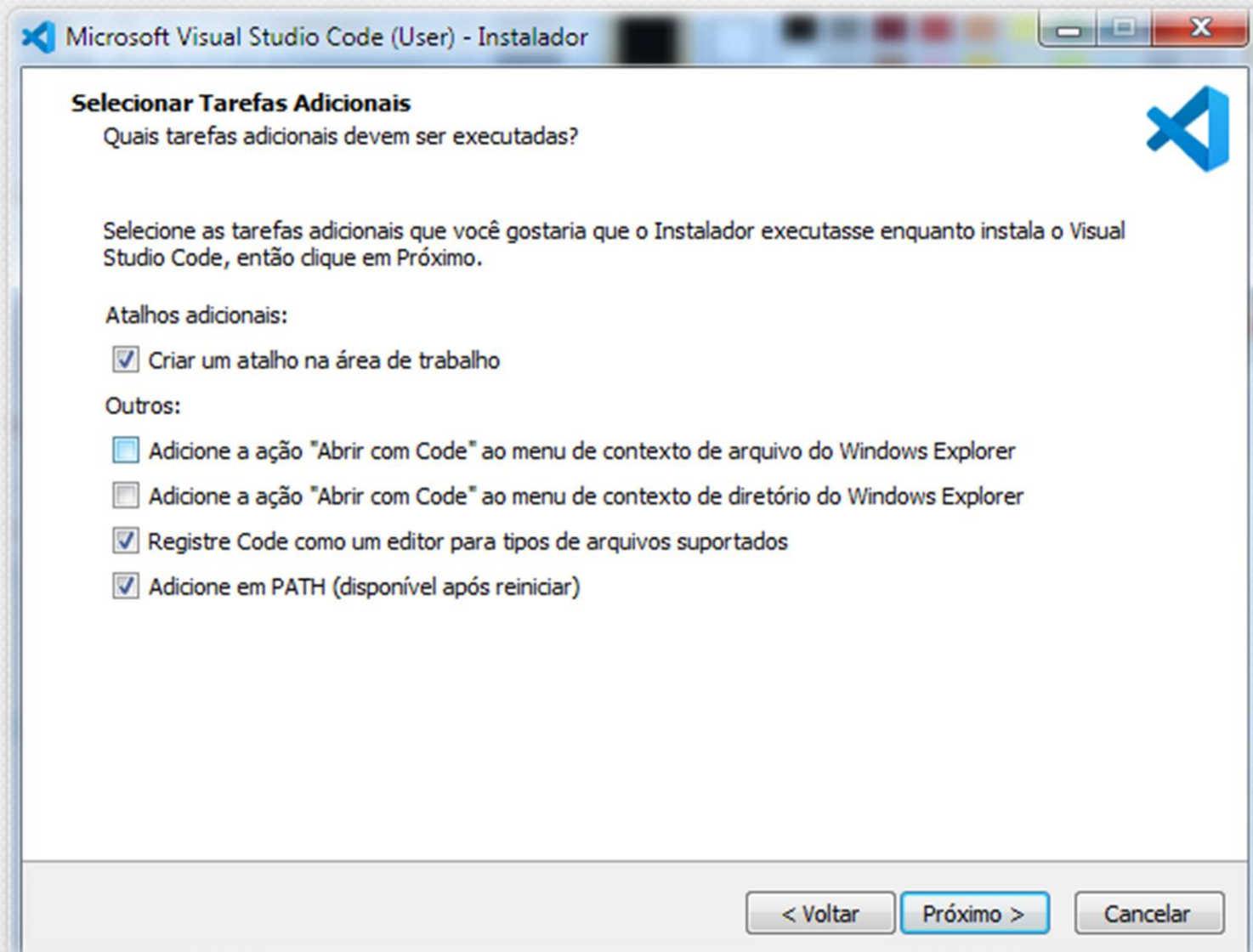
.rpm
Red Hat, Fedora, SUSE

.deb: 64 bit, ARM, ARM 64
.rpm: 64 bit, ARM, ARM 64
.tar.gz: 64 bit, ARM, ARM 64
Snap Store

Mac
macOS 10.10+

.zip: Universal, Intel Chip, Apple Silicon

Instalação do VS Code



Instalação do VS Code

The screenshot displays the Visual Studio Code interface with the Extensions view open. The left sidebar shows a list of installed and popular extensions. The 'Python' extension by Microsoft is highlighted with a yellow box. The main panel shows the details of the 'Python' extension, including its logo, version, and an 'Install' button, which is also highlighted with a yellow box. Below the 'Install' button, there is a message: 'Install this extension in all your synced Visual Studio Code instances'. The right sidebar shows the 'Python extension for Visual Studio' page, which includes a description of the extension and its features.

EXTENSIONS

Search Extensions in Marketplace

INSTALLED 0

POPULAR 28704

Python 2021.7.1060902895
IntelliSense (Pylance), Linting, Debugg...
Microsoft [Install](#)

C/C++ 1.5.1
C/C++ IntelliSense, debugging, and c...
Microsoft [Install](#)

Jupyter 2021.8.1081660962
Jupyter notebook support, interactive ...
Microsoft [Install](#)

ESLint 2.1.23
Integrates ESLint JavaScript into VS C...
Dirk Baeumer [Install](#)

Prettier - Code formatter 8.1.0
Code formatter using prettier
Prettier [Install](#)

Live Server 5.6.1
Launch a development local Server wi...
Ritwick Dey [Install](#)

Python ms-python.python
Microsoft | 39.743.028 | ★★★★★ | Repository
IntelliSense (Pylance), Linting, Debugging (multi-threaded, remote...
[Install](#) ⚙️

Install this extension in all your synced Visual Studio Code instances

[Details](#) [Feature Contributions](#) [Changelog](#) [Extension Pack](#)

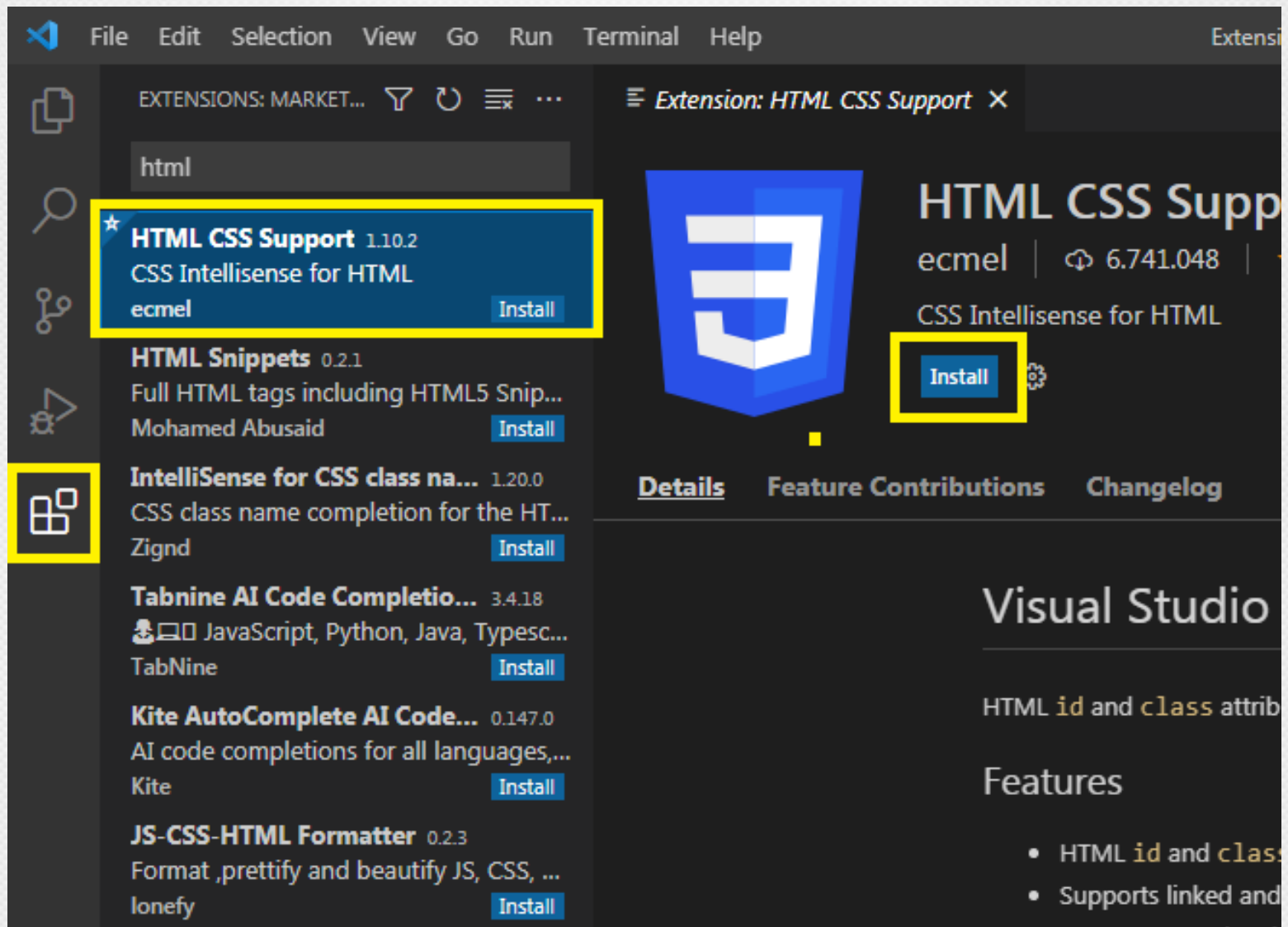
Python extension for Visual Studio

A Visual Studio Code extension with rich support for the Python such as IntelliSense (Pylance), linting, debugging, code navigation

Installed extensions

The Python extension will automatically install the Pylance and Jupyter notebooks. However, Pylance is an optional dependency, can also [uninstall](#) it at the expense of some features if you're using

Instalação do VS Code



Instalação do VS Code

The screenshot shows the Visual Studio Code interface with the Extensions view open. The search bar in the Extensions sidebar contains the text "portuguese". The list of extensions shows "Portuguese (Brazil) Language Pack" by Microsoft as the top result, highlighted with a yellow box. The main panel displays the details for this extension, including a globe icon, the name "Portuguese (Brazil) Language", the publisher "Microsoft", a download count of 562,759, and a five-star rating. The "Install" button is highlighted with a yellow box. Below the extension list, the "Brazilian Portuguese - Cod" extension is also visible. The right panel shows the "Details" tab for the selected extension, with the title "Pacote de Idioma Português" and a description in Portuguese.

File Edit Selection View Go Run Terminal Help

Extension: Portuguese (Brazil) Language Pack for Visual S

EXTENSIONS: MARKET... ...

portuguese

Portuguese (Brazil) Langua... 1.59.1
Português (Brasil)
Microsoft [Install](#)

Portuguese - Code Spell Ch... 0.1.7
Portuguese dictionary extension for V...
Street Side Software [Install](#)

Brazilian Portuguese - Cod... 0.1.7
Brazilian Portuguese dictionary extens...
Street Side Software [Install](#)

Portuguese Support for La... 3.8.0
Enables grammar checking of Portugu...
Adam Voss [Install](#)

Code Spell Checker Langua... 1.0.0
A pack containing all dictionaries avail...
Hyoretsu [Install](#)

Portuguese (Brazil) Language
Microsoft | 562.759 | ★★★★★ | Repos
Language pack extension for Portuguese (Brazil)

[Install](#)

[Details](#) [Feature Contributions](#) [Changelog](#)

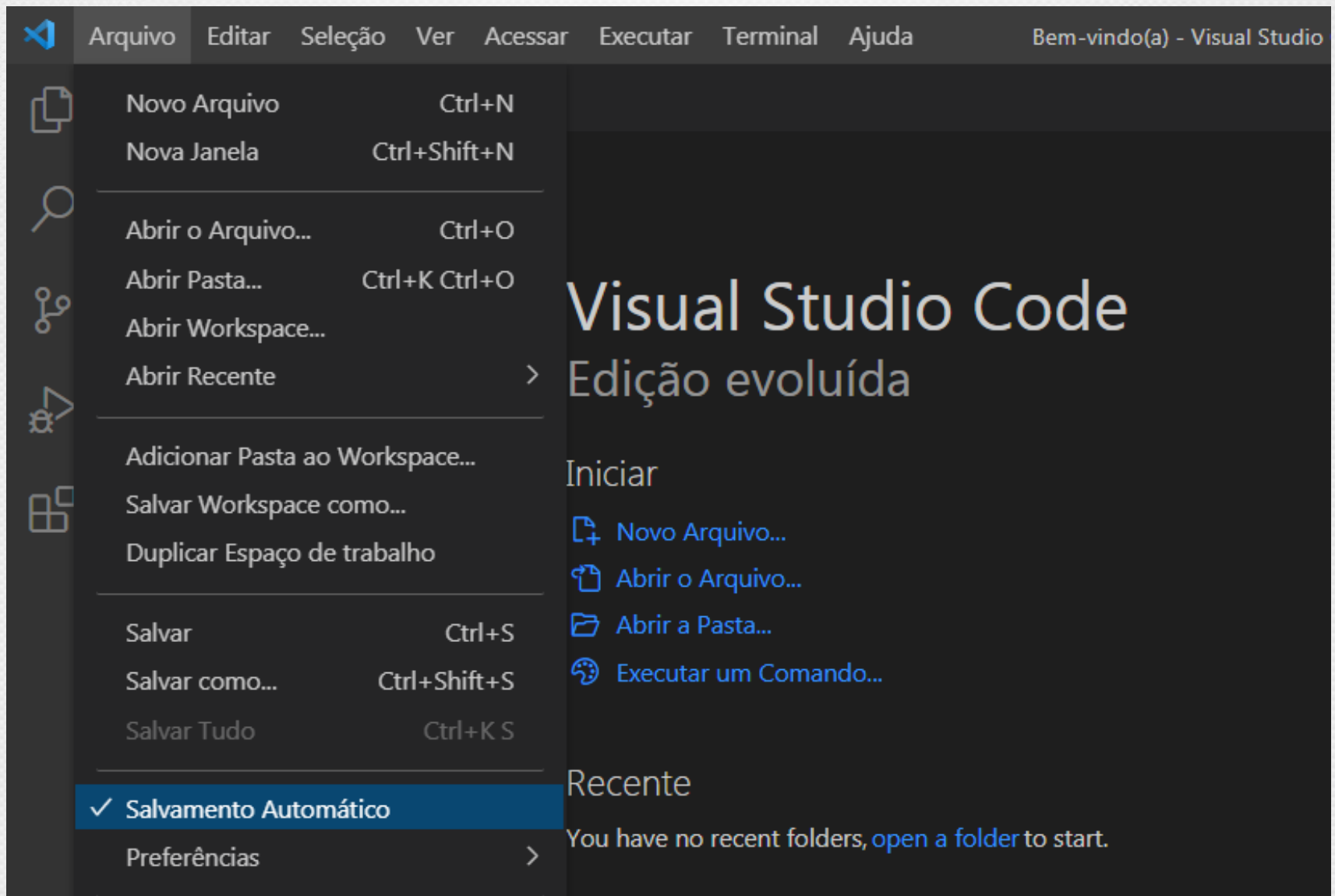
Pacote de Idioma Português

O Pacote de Idioma Português Brasileiro fornece uma In

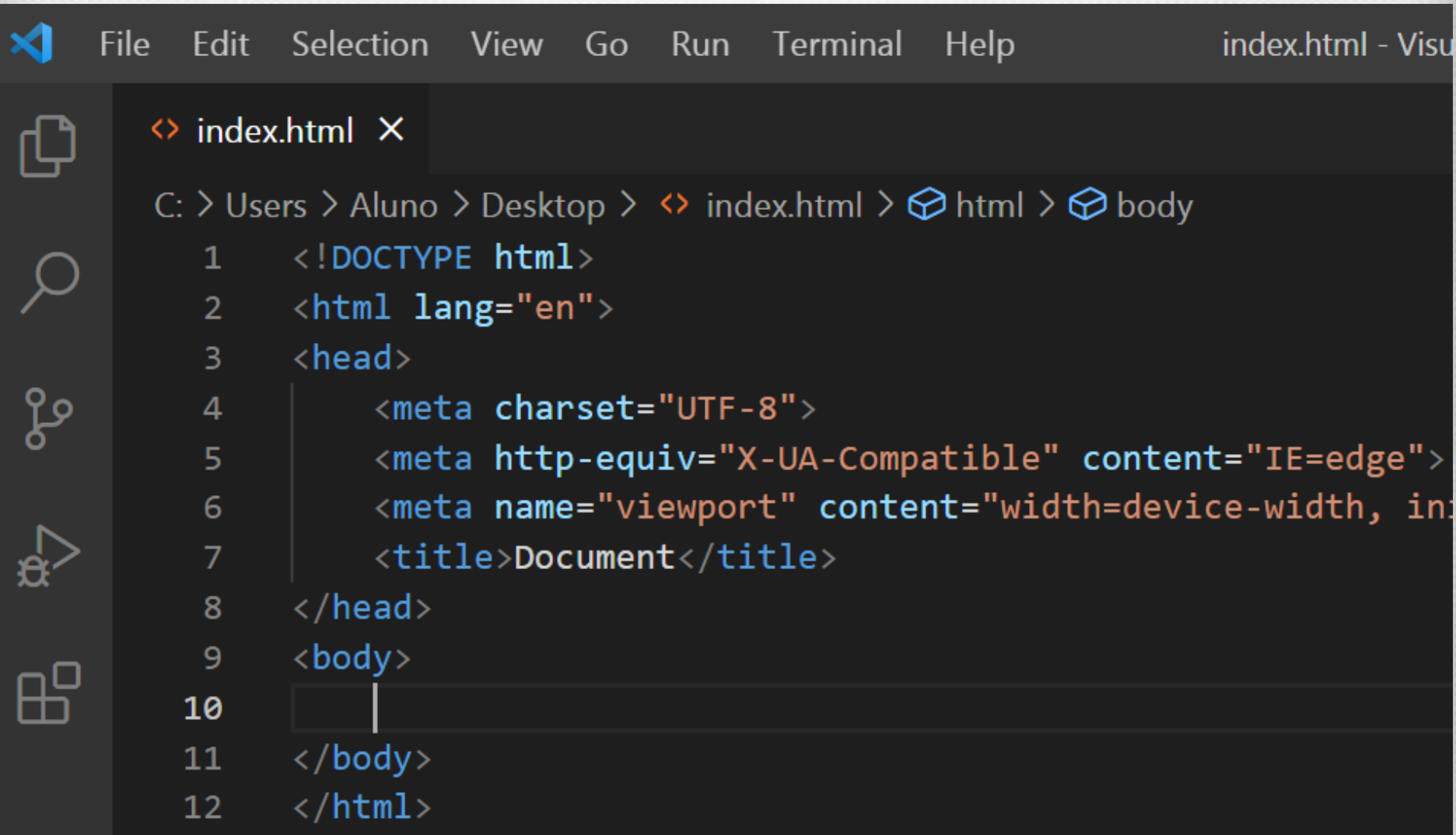
Como Utilizar

Você pode substituir o idioma da interface do usuário p
Idioma de Exibição". Pressione "Ctrl+Shift+P" para exibi
o Idioma de Exibição". Pressione "Enter" e será exibida u
"localidade" para mudar o idioma da interface do usuár

Instalação do VS Code



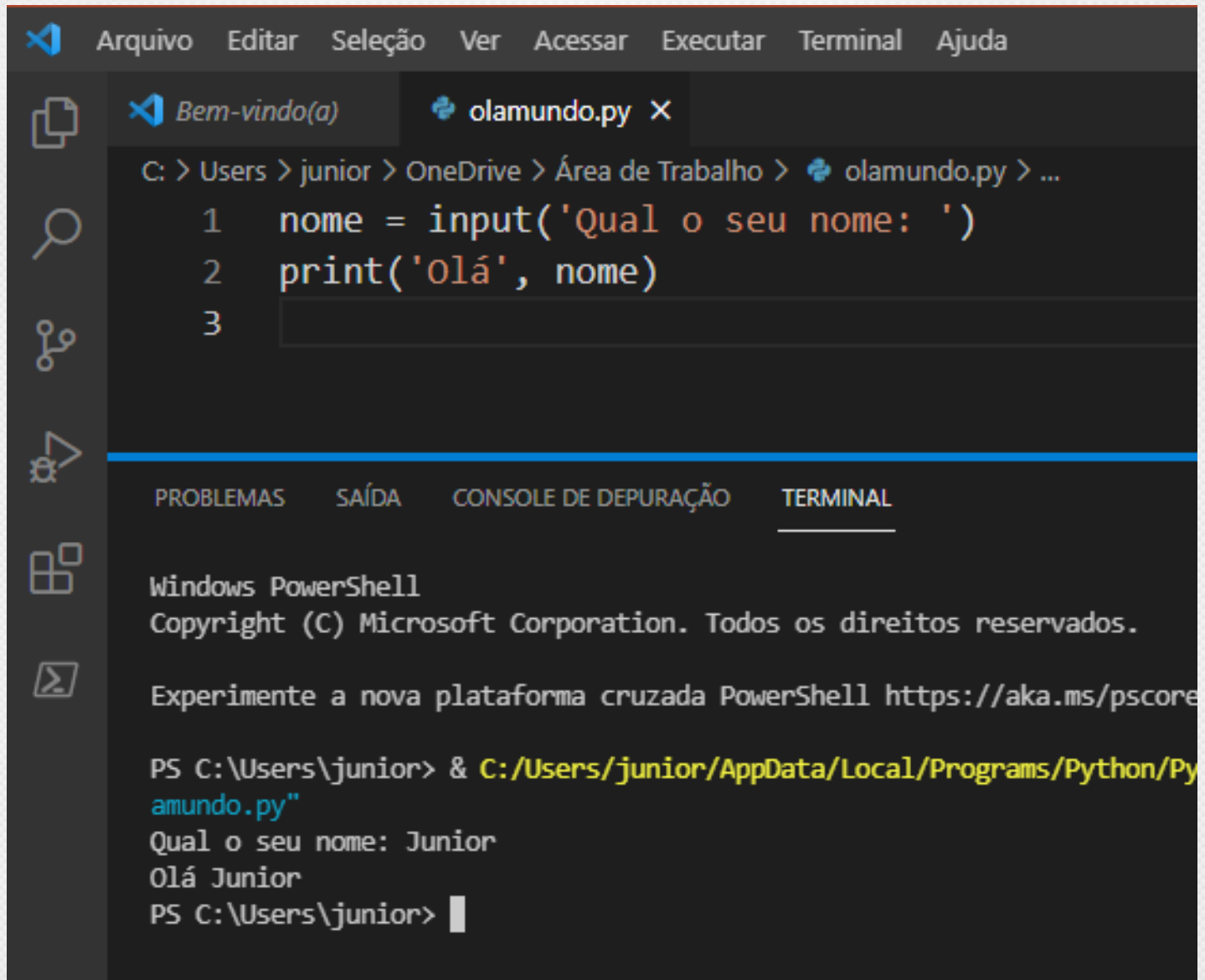
Instalação do VS Code



The image shows the Visual Studio Code editor interface. The top menu bar includes File, Edit, Selection, View, Go, Run, Terminal, and Help. The title bar on the right says "index.html - Visu". The left sidebar contains icons for Explorer, Search, Source Control, Run and Debug, and Extensions. The main editor area shows a file named "index.html" with the following HTML code:

```
<> index.html X
C: > Users > Aluno > Desktop > <> index.html > html > body
1  <!DOCTYPE html>
2  <html lang="en">
3  <head>
4      <meta charset="UTF-8">
5      <meta http-equiv="X-UA-Compatible" content="IE=edge">
6      <meta name="viewport" content="width=device-width, in
7      <title>Document</title>
8  </head>
9  <body>
10 
11 </body>
12 </html>
```

Executando Python no VS Code




The image shows the Visual Studio Code (VS Code) interface. The top menu bar includes 'Arquivo', 'Editar', 'Seleção', 'Ver', 'Acessar', 'Executar', 'Terminal', and 'Ajuda'. The left sidebar contains icons for Explorer, Search, Source Control, Run and Debug, Extensions, and Testing. The main editor area displays a file named 'olamundo.py' with the following Python code:

```
C: > Users > junior > OneDrive > Área de Trabalho > olamundo.py > ...  
1 nome = input('Qual o seu nome: ')  
2 print('olá', nome)  
3
```

Below the editor, the 'TERMINAL' tab is active, showing the output of the Python script executed in a Windows PowerShell window:

```
Windows PowerShell  
Copyright (C) Microsoft Corporation. Todos os direitos reservados.  
  
Experimente a nova plataforma cruzada PowerShell https://aka.ms/pscore  
  
PS C:\Users\junior> & C:/Users/junior/AppData/Local/Programs/Python/Py  
amundo.py"  
Qual o seu nome: Junior  
Olá Junior  
PS C:\Users\junior> |
```

Executando Python no VS Code

C: > Users > junior > OneDrive > Área de Trabalho >  olamundo.py > ...

```
1  n1 = int(input('Digite um número: '))
2  n2 = int(input('Digite outro número: '))
3  soma = n1 + n2
4  print('A soma é: {}'.format(soma))
5
```

PROBLEMAS

SAÍDA

CONSOLE DE DEPURAÇÃO

TERMINAL

Windows PowerShell

Copyright (C) Microsoft Corporation. Todos os direitos reservados.

Experimente a nova plataforma cruzada PowerShell <https://aka.ms/pscore6>

PS C:\Users\junior> & C:/Users/junior/AppData/Local/Programs/Python/Python39/python olamundo.py

Digite um número: 5

Digite outro número: 6

A soma é: 11

PS C:\Users\junior> █