The top 10 uses of Python in the real world :–

1. Web Development

Python comes with multiple web development frameworks like **Pyramid, Django, and Flask.** These frameworks are packed with standard libraries that **allow easy protocol integration and lead to a reduction in development time.**

2. Data Science

We all know that data science is one of the most in-demand skills in the market. Be it IT, manufacturing, or eCommerce, knowing data science is a sought-after skill. This is where Python steps in. Its multiple libraries such as **Pandas, TensorFlow, NumPy, etc help in extracting valuable information from the data.** Libraries like **Matplotib and Seaborn further allow a data science professional to focus on data visualization** through graphs and charts. It won't be an exaggeration to say that Python is the first thing that any data science professional needs to know

3. Artificial Intelligence and Machine Learning

One of the most important uses of Python is in AI. The reason for it is that Python is a **stable language** that has the **capacity to handle the computations required to build machine learning models.** Its libraries like **Keras, Pandas, NumPy** and others are suitable for machine learning applications. Furthermore, it is used in multiple AI solutions like **advanced computing, image recognition, data processing**, and more.

4. Enterprise Applications

Enterprise applications are used to serve the needs of an organization rather than individual users. The use of Python in building enterprise applications is done as it is a **robust language that can handle multiple requests of databases at once**. Even though the use of Python varies from one enterprise to another, its core functionalities like its **readability, functionality, and scalability** remain the same. Enterprise applications are one of the most notable uses of Python. **Tryton and Odoo** are platforms that help in developing such enterprise applications.

5. Education Sector

One of the other important uses of Python is seen in developing online courses and education programs. It is an easy to learn programming language for beginners since **its syntax matches that of English.** It offers a novice, a standard library, and a variety of resources to understand the language, thus **making the learning curve easier.** This is one of the many reasons why Python is the preferred programming language for beginners for the education program's development at **both basic and advanced levels.**

6. Web Scraping Applications

It refers to the scraping of huge quantities of data by companies for extracting customer information to make profitable decisions. Tools like **PythonRequest, Selenium, MechanicalSoup** are used in Python programming for building web scraping applications.

7. Game Development

Python has time and again displayed its capacity of contributing to the gaming industry in a massive way. Remember **Battlefield 2**; one of the most popular games in the early 2000s? It was developed using the Python programming language. Some of the top Python frameworks that are used in game development include **Pygame, PyKyra, Pyglet, PyOpenGL, Kivy, Panda3D, Cocos2D,** and more!

8. Software Development

One of the prime uses of Python is that it is used by software developers. Python **simplifies the software development process for complex apps.** It is used **for project management, as a support programming language, to build control, and testing.**

9. Desktop GUI **(Graphical User Interface)**

We know that Python is a **simple, stable, easy to learn, open-source, and platform-independent programming language.** These factors work in their favour of being used for developing desktop GUI. **Toolkits like PyQt, PyGUI, and WxPython** are widely used for building high-quality GUIs efficiently.

10. Operating Systems

Python is a powerful programming language and so is C. When these two are combined together, many operating systems are developed. The use of Python in creating operating systems came to life with **Ubuntu's Ubiquity, and Red Hat's Anaconda and Fedora.** OS made with Python are running billions of computers today.