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## INTRODUCTION TO THE PAYTON PROGRAMMING LANGUAGE.PYCHARM COMMUNITY ENVIRONMENT

**Annotation:** this article deals with the origins and causes of Payton, one of the currently common programming languages, and the PyCharm program.

**Keywords:** programming language, algorithm language, Python programming language, machine language, artificial intelligence, Pycharm.

**Annotatsiya:** mazkur maqolada hozirgi kunda keng tarqalgan dasturlash tillaridan bo'lgan Paytonning kelib chiqishi va sabablari hamda Pycharm dasturi haqida so'z yuritilgan.

**Kalit so'zlar:** dasturlash til, algoritim til, Python dasturlash tili, mashina tili, sun'iy intellekt, Pycharm.

An important way to improve electron Devices in this area during a time when current science and technology are developing is to develop programming languages suitable for them. Programming languages are algorithmic as well as machine languages, each of which is characterized by its own characteristics. Programming languages are an important means of communicating with a computer. They allow computers to issue commands in human language. The result of this is the opportunity to create software, web applications, mobile applications, as well as many other technological solutions. Algorithmic language is closely related to human languages, and machine language is the lowest-order language. The machine language consists of numbers and performs actions through certain codes. It is important to use internet resources to get information about the emerging news and popular languages in the field of programming, to be robust for programmers. Programming languages form the core of technological innovation. As well as the necessary tools for programmers. In-depth study of any programming language, as well as its application in practical projects, is important in improving the professional skills of the programmer. It is also important to keep track of innovations in the field of programming. The technology is developing rapidly, so sabali programmers are required to have information about the latest trends, new programming languages, as well as libraries. This knowledge allows programmers to create innovative solutions as well as more efficiently implement your projects.

The Python programming language was invented in the early 1990s by Guido van Rossum. During these periods, it was necessary to create an application that is convenient to use and has a wide range of capabilities. Such a need gave rise to the creation of a simple and understandable programming language – Python. An early version of python was produced in 1991 under the name Python 0.9.0. In this version, important functions such as list and line work, conditional phrases and cycles are added. Python has a large library as well as modules. This allows programmers to quickly and easily find solutions to various tasks. Python libraries cover scientific calculations, web programming, data analysis, and many other diverse fields. Python is known for its simple and concise syntax that makes it easy to read, understand code. It facilitates the development of program code as well as the provision of services, especially to those who are just starting a programming language. The features inherent in the syntax of the Python programming language are comprehensiveness, consistency, well – thought-out modularity, as well as scalability. Thanks to such features, the program code created in Python is easy to read. With the passage of periods, Python has gained great

popularity in the developer community as well as becoming one of the most used programming languages. Python topped the 2019 ranking of programming languages compiled by the TIOBE website. Python is currently one of the main programming languages. With it, various applications, a website and scientific calculations, artificial intelligence, etc. are developed. The biggest possibility of a Python programming language is in its open code as well as in the abundance of libraries. Alternatively, the code in it is calculated in compactness. The Python programming language is perfectly designed, unlike other programming languages. Python is a programming language that implements the management of other software tools as well as independent management of their components. In fact, Python can be studied as a multi-purpose programming language, it is possible to program a number of processes in this programming language tool. In the Python programming language, there is an incony of creating several types of programs at the same time, in contrast to other programming languagesю

Is an integrated development environment (derived from the English words IDE— integrated development environment) designed for the Python programming language. Pycharm is a powerful and cross-platform Python IDE that integrates all these development tools in one place. It has a rich character and is available in society (free and open source), as well as in professional publications. This software was developed by JetBrains based on the IntelliJ IDEA programming environment. The PyCharm tool has options for analyzing program codes, testing a project, as well as working with Django web-frameworks. In addition, the program also supports a terminal in the Linux operating system, that is, the user or programmer, who can work with the terminal in the PyCharm application itself. Currently, there are three different categories of the PyCharm program, these are:

- PyCharm Edu—designed for programming learners;
- PyCharm Community—designed for programmers, the motto of this category is from developers to developers;
- PyCharm Pro is a much more sophisticated version, and some of its services are distinguished by the fact that it is paid.

PyCharm is an integrated development environment (IDE) created by JetBrains for the Python Software Development language. Python is a fast, interpretable language suitable for data analysis and artificial intelligence, but it can also be used to run a web application or create a game. While any code editor can be used to write Python code, the PyCharm software platform is an environment for the Python programming languageю

### Literature used:

Amirov I. Pycharm community edition va visual studio code, dasturlash muhitlarining imkoniyatlari. file:///C:/Users/User/Downloads/\_Amirov+Islombek+Dilshodbek+o%E2%80%99g%E2%80%99li.pdf

<https://mohirdev.uz/blog/python-dasturlash-tilining-xususiyatlari-va-imkoniyatlari/>

<https://uzbekdevs.uz/darsliklar/python/python-da-kirish>

<https://alicode.uz/dasturlash-tillari-ular-haqida-toliq-malumot/>

<https://najottalim.uz/blog/58?srsId=AfmBOorsG7ZhORi8l6h3ECy09Nwy57KeLrEifuiRkUbW43hm3xHqIZ9Z>

<https://www.google.com/search?q=PYCHARM+COMMUNITY+MUHITINI+O%E2%80%98RNATISH&client=firefox-b->

[d&sca\\_esv=728b51f668ed5009&ei=M2dpZ\\_G3I6WQwPAPgrSU6Qo&ved=0ahUKEwixneuXgb6KAxUICBAIHQIaJa0Q4dUDCBA&uact=5&oq=PYCHARM+COMMUNITY+MUHITINI+O%E2%80%98RNATISH&gs\\_lp=Egxnd3Mtd2l6LXNlcnAiJIBZQ0hBUk0gQ09NTVVOSVRZIE1VSEIUSU5JIE\\_igJhSTkFUSVNIMgcQIRigARgKSIwUULQLWLQLcAJ4AZABAJgB4wGgAeMBqgEDMi0xuAEDyAEA-AECp](https://www.google.com/search?q=PYCHARM+COMMUNITY+MUHITINI+O%E2%80%98RNATISH&gs_l=AxUICBAIHQIaJa0Q4dUDCBA&uact=5&oq=PYCHARM+COMMUNITY+MUHITINI+O%E2%80%98RNATISH&gs_lp=Egxnd3Mtd2l6LXNlcnAiJIBZQ0hBUk0gQ09NTVVOSVRZIE1VSEIUSU5JIE_igJhSTkFUSVNIMgcQIRigARgKSIwUULQLWLQLcAJ4AZABAJgB4wGgAeMBqgEDMi0xuAEDyAEA-AECp)