**BSIXPPROTO**

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***Abstract***

The conspicuousness of this examination is to investigate the different elements of how various ages of gadgets are utilized and planned truly to make things effective and usable in the long haul. The scientists led an essential programming language that depended on Python Programming Language bringing natural functionalities however redid experience to the clients and to assess our new usage of programming language.

***Keywords*BASIC, Language, Programming, Python, Syntax, and Tokens**

# **INTRODUCTION**

According to Lateef, Usman & Owoade, Akeem & B.L., Abimbola & Ogunsanwo, Gbenga. (2016). The programming languages are developed artificial languages that are used in preparing coded instructions for later execution on the computer. These languages are composed of set rules or “syntax” that determines the codes’ semantic expressions that are translated in the language. Each of the languages needs translators like interpreters or compilers in running.

Given the customary programming language, it doesn't grasp the usefulness of the program. It just gives essential info and yield in its language and is reasonable enough to utilize. As time advanced, so did programming languages. Presently it very well may be ordered into various sorts: Procedural Programming Language, Functional Programming Language, and etc.These various classes and orders are to sort out the world and give different meanings to see designs in a consistent manner. Projects are normally alluded to as programming. Programming is basic to a PC since it controls everything the PC does. The entirety of the product that we use to make our PCs helpful is made by people functioning as software engineers or programming designers.

Bsixproto functions are based from Python, a high-level programming language with in and out criteria of program specification and unit test plan. The central point of development behind Bsixproto is the Python IDE. The implementation of handling and creating the process of Bsixproto makes it easier to perform in the terminal because it is simple.

There are diverse programming languages yet some proposed to be broadly useful, others are helpful just, for profoundly specific applications. In a time where PC innovation can do numerous things, its advancement assumes a basic part in various businesses. Present day Programming Language can empower PCs to play out a wide scope of errands considering it is viable with the Operating System and the fittings itself. Early PCs were just imagined as figuring gadgets however as years passed by, messing around, and sending and accepting email, and riding the web is presently conceivable on the Computer by the assistance of programming languages at the back-end.

The objectives of this study is to develop a working programming language that can compute or perform basic and logical queries. The program itself will allow future researchers to further improve or rework the language for better features on the language.

**II. LIGHTWEIGHT**

Syntax and semantics made Python one of the simplest programming languages in the world. Bsixproto aims to create the same user experience that Python offers to its users one of these is the lightweight and simple use of high level programming language syntax, it is geared towards a more simpler and easy code block building.

Syntax inside the program are:

*Table 1. Mathematical Operations*

|  |  |
| --- | --- |
| **Mathematical Operations** | |
| + | Value + Value |
| - | Value - Value |
| \* | Value \* Value |
| / | Value / Value |
| % | Value % Value |
| ^ | Value ^ Value |

Table 1 shows the available Mathematical Data Types that are used to output calculations of the given user input given by integer value.

*Table 2. Data Types*

|  |  |
| --- | --- |
| **Data Types** | |
| Integer | |
| Bool | |
| String | |
| Decimal/Float | |
| VarChar | |

Table 2 shows the valid and available data types of the Bsixproto. These data types represent how programmers can execute that code, in which by determining if the input is String, Integer, Boolean, Float or Decimal, or Varchar type.

*Table 3. Functions*

|  |  |
| --- | --- |
| **Syntax** | |
| HELP() | |
| INPUT()  value | |
| ABS()  value | |
| CNT()  value | |

Table 3 shows the available built-in functions of the Bsixproto

HELP()-provides the user the overview of commands available in Bsixproto

INPUT()-lets the user type in an integer or text on the Terminal screen, and is available to use followed by other syntax.

ABS()-converts any integer value to a whole positive integer.

CNT()-shows how many characters are there on its given input.

*Table 4. Loop statements*

|  |  |
| --- | --- |
| **Syntax** | **Description** |
| FOR | FOR + “the condition” + THEN + “the statement” |
| WHILE | WHILE + “the condition” + THEN + “the statement” |

Table 4 shows the available loop functions of the program.“FOR” loop is used to repeat a section of code a given number f time depending on the user. The “WHILE” loop is used to repeat a section of code on a given number of time until the condition provided by the user has been made.

*Table 5.Condition types*

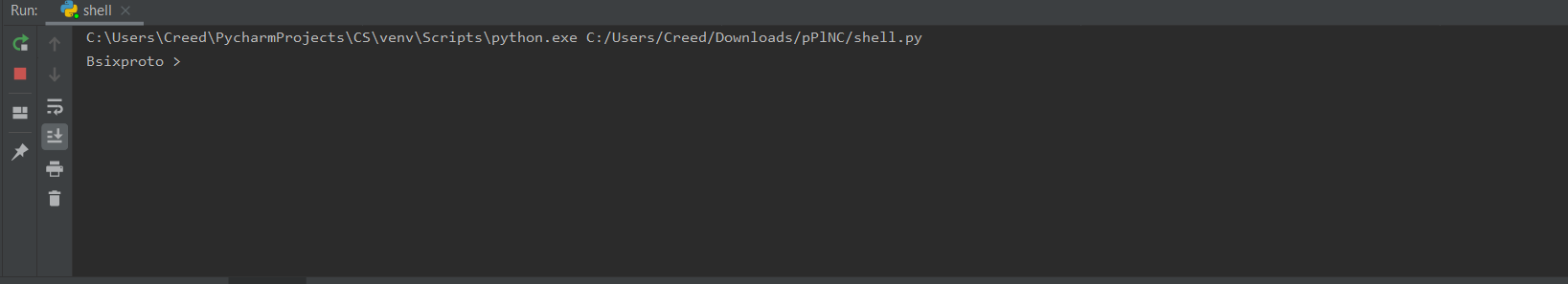
|  |  |
| --- | --- |
| **Name** | **Syntax** |
| > | value>value |
| < | value<value |
| = | value=value |
| >= | value>=value |
| <= | value<=value |
| == | value==value |
| IF  ELSE | IF “condition”then “statement”  ELSE”statement” |

Table 5 shows the logical conditions available on Bsixproto.the basic logic conditions are given such as <,>,= and other conditions. If-Else conditions are for conditions that require more elaborate specifications.

**III. SYSTEM DESIGN**

Bsixproto was designed to be lightweight and simple, from the the syntax to its designs that would be convenient for the user using high level language.

Running it uses the IDEs called pycharm or any IDEs that support the python language.



***Figure 1. Bsixproto terminal***

**REFERENCES**

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