

Application of python

The applications are:

- (i) Web and internet development.
- (ii) Games.
- (iii) Language development
- (iv) Operating system.
- (v) Image processing and graphic design application.
- (vi) Scientific and computational application.
- (vii) Business application development.

Advantages of python

- a) Interpreted
- b) Free and open source
- c) Extensible
- d) Object Oriented
- e) Built-in data structure.
- f) Readability
- g) High-level language.
- h) Cross platform.

Disadvantages of python

Speed

Mobile Development

Memory Consumption

Database Access

Python has limitations with database access. As compare to the popular technologies like JDBC and ODBC, the Python's database access layer is found to be bit underdeveloped and

primitive. However, it cannot be applied in the enterprises that need smooth interaction of complex legacy data.

Runtime Errors

Python programmers cited several issues with the design of the language. Because the language is dynamically typed, it requires more testing and has errors that only show up at runtime.

```
>>> print ("Hello World")
```

```
>>> 122
```

```
122
```

```
>>> print (4 * 20)
```

```
80
```

```
>>> "py" * 5
```

```
'pypppy'
```

Reserved words

Reserved words also called keywords are defined with predefined meaning and syntax in python language. These keywords have to be used to develop programming instructions.

Reserved words in python

False class finally is return
None continue for lambda try
True def from nonlocal while
and del global not with
as elif if or yield
assert else import pass
break except in raise

Rules for creating variables

- ① A variable name must start with a letter or the underscore character.
- ② A variable name cannot start with a number.
- ③ A variable name can only contain alpha-numeric characters and underscores (A-z, 0-9, and _).
- ④ Variable names are case-sensitive (name, Name and NAME are three different variables).
- ⑤ The reserved words (keywords) cannot be used naming the variable.

Literals

- i) String literals.
- ii) Numeric literals
- iii) Boolean literals.
- iv) Collection.
- v) Special