01 Basic Syntax

Basic Syntax

Python is a case sensitive programming language. Thus, **Manpower** and **manpower** are two different identifiers in Python.

Script mode programming

```
# example.py
print("Hello, World!")
```

Running the script

```
python3 example.py
```

Interactive mode programming

```
python3
>>> print("Hello, World!")
```

Identifiers
Identifier is a name used to identify a variable, function, class, module or other object. An identifier starts with a letter A to Z or a to z or an underscoer (`_`) followed by zero or more letters, underscores and digits (0 to 9).

Python does not allow punctuation characters such as @, $, and % within identifiers.

Key Words
Key Words are reserved words for the programming language.

Lines and Indentation
In python blocks of code are denoted by **line indentation**, which is rigidly enforced.

```
if True:
        print ("True")
else:
        print ("False")
```

if True: print ("True") else: print ("False")

Multi-Line Statements

Python does, allow the use of the line continuation character () to denote that the line should continue.

```
total = item_one + \
                item_two + \
                item_three

days = ['Monday', 'Tuesday', 'Wednesday',
                'Thursday', 'Friday']
```

Comments in Python

A comment is a programmer-readable explanation or annotation in the source code.

All characters after the # and up to the end of the physical line are part of the comment and the Python interpreter ignores them.

```
# First comment
print("Hello, World!") # Second comment
```

Multiple lines comment

```
# This is a comment.
# This is a comment, too.
# This is a comment, too.
# I said that already.
```

Taking user input

```
input("\nGive some input")
```

Multiple Statements on a Single Line

```
import sys; x = 'foo'; sys.stdout.write(x + '\n')
```

Command Line Arguments in Python

```
python3 -h

# or
```

```
python3 --help
```