Input/Output  
Variables  
Data Types  
Operators

Interpreter translates the python code to the Machine code (0,1)

Why Python?  
Simple, Easy, Free and Open Source.  
High Level Language  
Portable (code in windows can be run in Linux and mac also vice versa)

With Python one can develop website, go to ml, data science

Below are the Python character set  
  
Letters A-Z  
Digits 0 to 9  
Special Symbols -+-\*/ etc.  
Whitespaces – Blankspace, tab, Carriage return, new line,formfeed  
Other Characters – Python can process all ASCII and Unicode characters(<https://en.wikipedia.org/wiki/List_of_Unicode_characters#:~:text=As%20of%20Unicode%20version%2015.1,and%20some%20additional%20related%20characters>.)

You cannot use Punjabi or marathi characters

**Variable** – name given to a memory location in a program and it changes as per given value

Name=” Srikar”  
age=34  
price=1000  
  
Memory location

Name age price

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Srikar | 34 | 1000 |  |  |  |

Rules for creating identifiers:

Can be combination of uppercase and lowercase letters, digits or underscore  
ex: var\_1, var\_for\_print, myvar  
 cannot start with digit **1var** is invalid  
we can’t use special symbols too! #@%$ etc in our identifier

Identifiers can be of any length.

a-z ,A-Z, 0-9

Different type of Data in Python  
  
  
**Integers(+ve,-ve,0)**

**String(“Srikar”,”hello”,’a’,””done””)  
Float  
Boolean**

**None**

Reserved keyword in Python you cannot keep reserved keywords as identifiers

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

Types of operators

|  |  |
| --- | --- |
| Arithmetic operators | +-\*/%\*\* |
| Relational/comparison operators | ==,!=,>,<,>=,<= |
| Assignment operators | =,+=,-=,\*=,/=,%=,\*\*= |
| Logical operators | not and or |

Input in Python

Input() statement is used to accept values (using keyboard) from user

Input() #result is always a str  
int(input()) #int  
float(input()) #float