**CHAPTER - 2**

**DATATYPES**

The datatypes are the most important for any language for now we will be seeing language for generalized type then for specific types. We will be seeing the datatypes in details in further chapters for now we will see the following types:

* Number : This datatype for numerical data.
* Character : This for character data. Works for Unicode character.
* String : This for holding a group of characters.
* Vector : This for holding multiple values of any types
* Boolean : This for holding the true and false value
* Double : This for holding the floating or rational values.
* Byte : This for memory related work.

The language further contains many helper types that help in developing the language in general:

* Any : This can contain any data of any type provided there is method to convert back to type.
* Variant : This is like union and can work with multiple values.
* Optional : This help in function in which we don’t want to return values sometimes.
* $Class : This is similar to java Class class but relatively faster and language dependent.

(Note: The $Class is also used to create metaclass.)

* $Object : This is similar to java Object class.