Determining the Datatype of a Variable

- To know the datatype of a variable or object - **Type() function**.
- Every datatype, function, method, class, module, lists, sets etc. are all objects in Python.

Example:

```
a=15
print(type(a))

a=15.15
print(type(a))

a='Hello'
print(type(a))

print(type("Hello"))

lst=[1,2,3,4,5]
print(type(lst))

t=(1,2,3,4,5)
print(type(t))

s={1,2,3,4}
print(type(s))
```

What about characters?

- Python does not have a char datatype to represent individual characters.
- It has **str datatype** which represents strings.

Example:

```
ch='A'
print(type(ch))

str="Hello"
print(str[0])

for i in str:print(i)
```

```
print(str[0].isupper()) #checking if 'H' is capital letter or not
print(str[1].isupper()) #checking if 'e' is capital letter or not
```

User-Defined Data-types

- Created by the programmer.
- For Example: an array, a class, or a module.

Constants in Python

- Type of variable whose value cannot be changed.
- Defining constants is not possible.
- A programmer can indicate a variable as a constant by writing its name in all capital letters.
- PI_VALUE=3.14

Identifiers and Reserved Words

- An **identifier** is a name that is given to a variable or function or class etc.
- They should always start with a nonnumeric character.
- For example: salary, name1 etc.

  Salary = 55000.75

- **Reserved words** are the words that are already reserves for some particular purpose.

NAMING CONVENTIONS IN PYTHON

-Refer the PDF.