

## What is a data type?

Data types are the classification or categorization of data items. Variables can hold values of different data types and different datatypes can do different things. The most important datatypes are Integer, float, string, Boolean

Below are the details of these datatypes:

- **Integer (int)**- Integer means a non-decimal point numeric number. Integer can take both negative and positive values. Eg-- 4, 6,10, -50, 6513

- **Float**- The float type in Python designates a floating-point number. float values are specified with a decimal point. Float can take both negative and positive values. Eg – 5.4, -2.1113, 1.1, -73.87

- **String(str)**- Strings are sequences of character data. Strings may contain alphabets or numbers or a combination of both. Strings literals may be delimited using single or double quotes. All the characters between the opening delimiter and the closing delimiter are a part of the string. Eg- “Hello World”, ‘My name is John’, “My area pin-code is 121121”

- **Boolean(bool)**- Boolean means True or False. An object can take a value of True or a value of False.

To check the data type of a variable, use type function ‘type()’ . Below are a few examples on function ‘type()’

```
In [72]: type(True)
```

```
Out[72]: bool
```

```
In [45]: type(1)
```

```
Out[45]: int
```

```
In [46]: type(1.0)
```

```
Out[46]: float
```

```
▶ In [47]: type('Hello World')
```

```
Out[47]: str
```

```
In [48]: type('$')
```

```
Out[48]: str
```