

Type Conversion:

- Converting one data type to another.

There are two types of type conversion:

1. Implicit
2. Explicit

In Implicit type conversion of data types in Python, the Python interpreter automatically converts one data type to another without any user involvement.

```
In [2]: #example:
a=10
b=12.645
type(b)
```

```
Out[2]: float
```

```
In [3]: type(a)
```

```
Out[3]: int
```

```
In [4]: c=a+b
print(type(c))
<class 'float'>
```

Here, int + float= float (Python convert it automatically to float because, if it converted c in int, then some values may get lost after decimal)

In Explicit Type Conversion in Python, the data type is manually changed by the user as per their requirement.

```
In [5]: a=2.578
type(a)
```

```
Out[5]: float
```

```
In [6]: a=int(a)
print(a)
```

```
2
```

```
In [7]: type(a)
```

```
Out[7]: int
```

With explicit type conversion, there is a risk of data loss since we are forcing an expression to be changed in some specific data type.

```
In [8]: #lets see few other example, converting string to tuple
a="Mango"
type(a)
```

```
Out[8]: str
```

```
In [9]: a=tuple(a)
```

```
In [10]: print(a)
('M', 'a', 'n', 'g', 'o')
```

```
In [11]: type(a)
```

```
Out[11]: tuple
```

```
In [12]: #Similarly we can convert string to set but most important is int to float, float to int
a="Ram"
a=set(a)
```

```
In [13]: print(a)
{'a', 'm', 'R'}
```

```
In [14]: type(a)
```

```
Out[14]: set
```

```
In [ ]:
```

