

what is the difference between int, float, and str data types in python? provide examples for each one?

In Python, int, float, and str are three different data types used to represent different kinds of values.

1. **int:** This data type is used to represent integer numbers, which are whole numbers without a fractional part. Examples include 1, 42, -7, and 0.

Example:- Int

```
a = 42
```

```
b = -7
```

```
c = 0
```

```
print(a) # Output: 42
```

```
print(b) # Output: -7
```

```
print(c) # Output: 0
```

2. **float:** This data type is used to represent floating-point numbers, which are numbers with a decimal point. Examples include 3.14, -2.5, 0.0, and 1.0.

Example:-float

```
x = 3.14
```

```
y = -2.5
```

```
z = 0.0
```

```
print(x) # Output: 3.14
```

```
print(y) # Output: -2.5
```

```
print(z) # Output: 0.0
```

3. **str:** This data type is used to represent strings, which are sequences of characters. Examples include "hello", "123", "3.14", and "Python".

Example:string

```
name = "Bahubali"
```

```
greeting = "hello"

number_as_string = "123"

print(name)      # Output: Bahubali

print(greeting)  # Output: hello

print(number_as_string)  # Output: 123
```

2. how can you convert a string "123" into an integer 123 in python? write a code?

Given string

```
number_as_string = "123"
```

Convert the string to an integer

```
number_as_int = int(number_as_string)
```

Print the integer

```
print(number_as_int)          # Output: 123
```