Literals

Literals = basic **data values** for variables.

Types in Python:

- *Numeric literals*
- *String literals*
- *Boolean literals*
- *Special literals*

1. Numeric literals

In [1]:
```
# Integer Literals
a = 0b1010  # Binary
b = 100     # Decimal
c = 0o310   # Octal
d = 0x12c   # Hex

# Float Literals
f1 = 10.5
f2 = 1.5e2
f3 = 1.5e-3

# Complex Literal
x = 2 + 3.14j

print(a, b, c, d)
print(f1, f2, f3)

print(x, x.real, x.imag)
```

```
10 100 200 300
10.5 150.0 0.0015
(2+3.14j) 2.0 3.14
```

2. String literals

In [7]:
```
string = 'This is Python'
strings = "This is Python"
char = "C"    # there is no such data type in python
multiline_str = """This is a multiline string with more than one line code."""
unicode = u"\U0001f600\U0001F606\U0001F923"
raw_str = r"raw \t string"
print(string)
print(strings)
print(char)
print(multiline_str)
print(unicode)
print(raw_str)
```

```
This is Python
This is Python
C
This is a multiline string with more than one line code.
😀 😆 🤣
raw \t string
```

3. Boolean literals

In [8]:
```
a = True + 4   # True == 1
b = False + 10 # False == 0

print("a:", a)
print("b:", b)
```

```
a: 5
b: 10
```

4. Special literals

In [11]:
```
a = None
print(a)
```

```
None
```

In [12]:
```
# Variable Declaration
k = None
print(k)
```

```
None
```

In [13]:
```
g = None
```

In [14]:
```
print(g)
```

```
None
```

In [15]:
```
q = None
```

In [16]:
```
q
```

In [27]:
```
A = None
print(A)
```

```
None
```

In [7]:
```
a = u"\U0001F40E"
print(a)
```

🐎

In [8]:
```
b =u"\U0001F622"
print(b)
```

😢

In [9]:
```
c = u"\U0001f433"
print(c)
```

🐳

In [11]:
```
print(k)
```

```
None
```

In [10]:
```
b
```

```
---------------------------------------------------------------------------
NameError                                 Traceback (most recent call last)
Cell In[10], line 1
----> 1 b

NameError: name 'b' is not defined
```

In [10]:
```
a
```

Out[10]: 5

In [9]:
```
s
```

```
---------------------------------------------------------------------------
NameError                                 Traceback (most recent call last)
Cell In[9], line 1
----> 1 s

NameError: name 's' is not defined
```

In [12]:

In [ ]:

In [ ]: