```
In [2]:
name = "sunil"
age = 36
print(name)
print(age)
sunil
36
In [7]:
print("sunil")
print(name,age)
sunil
sunil 36
In [9]:
print("my name is " , name)
print("my age is" ,age)
my name is sunil
my age is 36
In [15]:
course = "pcai"
cohort = "august"
print("i belong to " , course,"i belong" , cohort)
i belong to pcai i belong august
In [17]:
name = "sunil"
age = 36
type(name),type(age)
Out[17]:
(str, int)
In [20]:
name= "sunil kumar"
age = 36
height = 166.65
weight = 72
Out[20]:
float
```

```
In [21]:
type(age)
Out[21]:
int
In [22]:
type(height)
Out[22]:
float
In [23]:
type(weight)
Out[23]:
int
In [24]:
type(name)
Out[24]:
str
```

Data Types of Pytyhon

- some data types are mutable and some are immutable
- · Mutable are the ones which can be modified
- immutable are the ones that can not be modified once you create them

Below given are the few data types that we have in python

- Numeric
- string
- Tuples
- list
- set
- · dictionaries
- None
- Range

Mutable data tyes in python

- List
- Dictionaries
- Set

Immutable Date Types in python

- Numeric
- String
- Tuples
- Let's start our discussion with the immutable data types in python
- we will start our discussion with Numeric data types in python

Numeric Data Types in Python

In Python we have 4 numeric data types

- Integer
- Float
- Boolean
- Complex

Let's talk about the integer data types in Python

```
In [31]:

# Create two variables a and b with some integer values assigned to them
a = 25
b = 2
type(a)

Out[31]:
int

In [28]:
type(b)
Out[28]:
int
```

```
In [33]:
```

```
# Let's perform some arithmetic operations on the integer data types
print(a + b) # addition 25+2
print(a - b) # subtraction 25-2
print(a * b) # Multiplication 25 * 2
print(a / b) # float division
                                  25/2 = 12.5
print(a // b) # Truncated division 25/2= 12.5=we can roun it 12. ITS TAKE WHOLE NO 0
F PART
print(a ** b) # Exponential operator
                                          25*25
27
23
50
12.5
12
625
In [ ]:
# create to variables x and y with integer values.
#then perform float division , truncated division and also exponent (find x rised to th
e power y)
In [34]:
x = 10
y = 20
print(x / y)
print(x // y)
print(x ** y)
0.5
1000000000000000000000
In [35]:
### float data type in python
a = 2.56
b = 3.57
type(a)
Out[35]:
float
In [1]:
## float data type in python(float mean decemiales )
a = 2.56
b = 3.57
type(a)
Out[1]:
```

float

```
In [6]:
print(type(a))
<class 'float'>
In [2]:
a = 12.9
b = 3.6
c = a + b
d = a - b
e = a * b # whatch out for the round off error !
f = a / b
print(a, b, c, d, e, f, sep="\n")
print(a, b, c, d, e, f)
12.9
3.6
16.5
9.3
46.440000000000005
3.583333333333333
12.9 3.6 16.5 9.3 46.4400000000000 3.583333333333333
In [ ]:
```