Some Very Important Points

- Before we explore more about these data types , let us understand following important points regarding Python's data types:

1. **DATA TYPES IN PYTHON ARE DYNAMIC**

1. **SIZE OF THE DATA TYPE IS ALSO DYNAMICALLY MANAGED**

1. **DATA TYPES ARE UNBOUNDED**

Some Very Important Points

1. **DATA TYPES IN PYTHON ARE DYNAMIC**

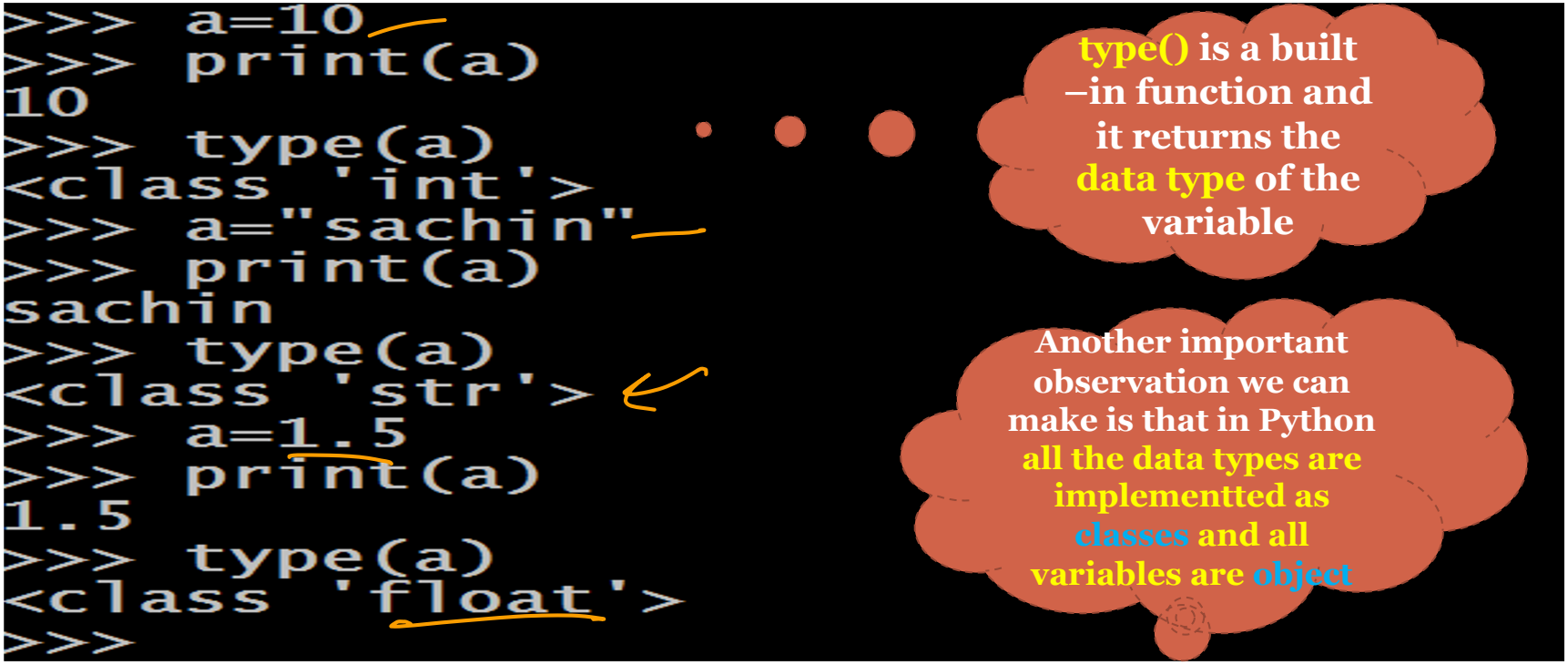
- The term **dynamic** means that we can assign different values to the same variable at different points of time.

- Python will dynamically change the type of variable as per the value given.

5

"python"

Some Very Important Points



Some Very Important Points

2. SIZE OF THE DATA TYPE IS ALSO DYNAMICALLY MANAGED

int 4 bytes
float 8 bytes

- In **Python** the size of **data types** is **dynamically managed**
- Like **C/C++/Java** language , variables in **Python** are **not of fixed size**.
- **Python makes them as big as required** on demand
- There is no question of how much memory a variable uses in **Python** because **this memory increases as per the value being assigned**

Some Very Important Points

- **Python** starts with **initial size** for a variable and then increases its size as needed up to the **RAM limit**
- This initial size for **int** is **24 bytes** and then increases as the value is increased
- If we want to check the size of a variable , then **Python** provides us a function called **getsizeof() .**
- This function is available in a module called **sys**

Some Very Important Points

```
>>> import sys
>>> sys.getsizeof(0)
24
>>> sys.getsizeof(1)
28
>>> sys.getsizeof(123456789123456789123456789123456789)
40
>>>
```

Some Very Important Points

3. DATA TYPES ARE UNBOUNDED

- Third important rule to remember is that , in **Python** data types like **integers** don't have any range i.e. **they are unbounded**
- **Like C /C++ /Java they don't have max or min value**
- So an **int** variable can store **as many digits as we want**.