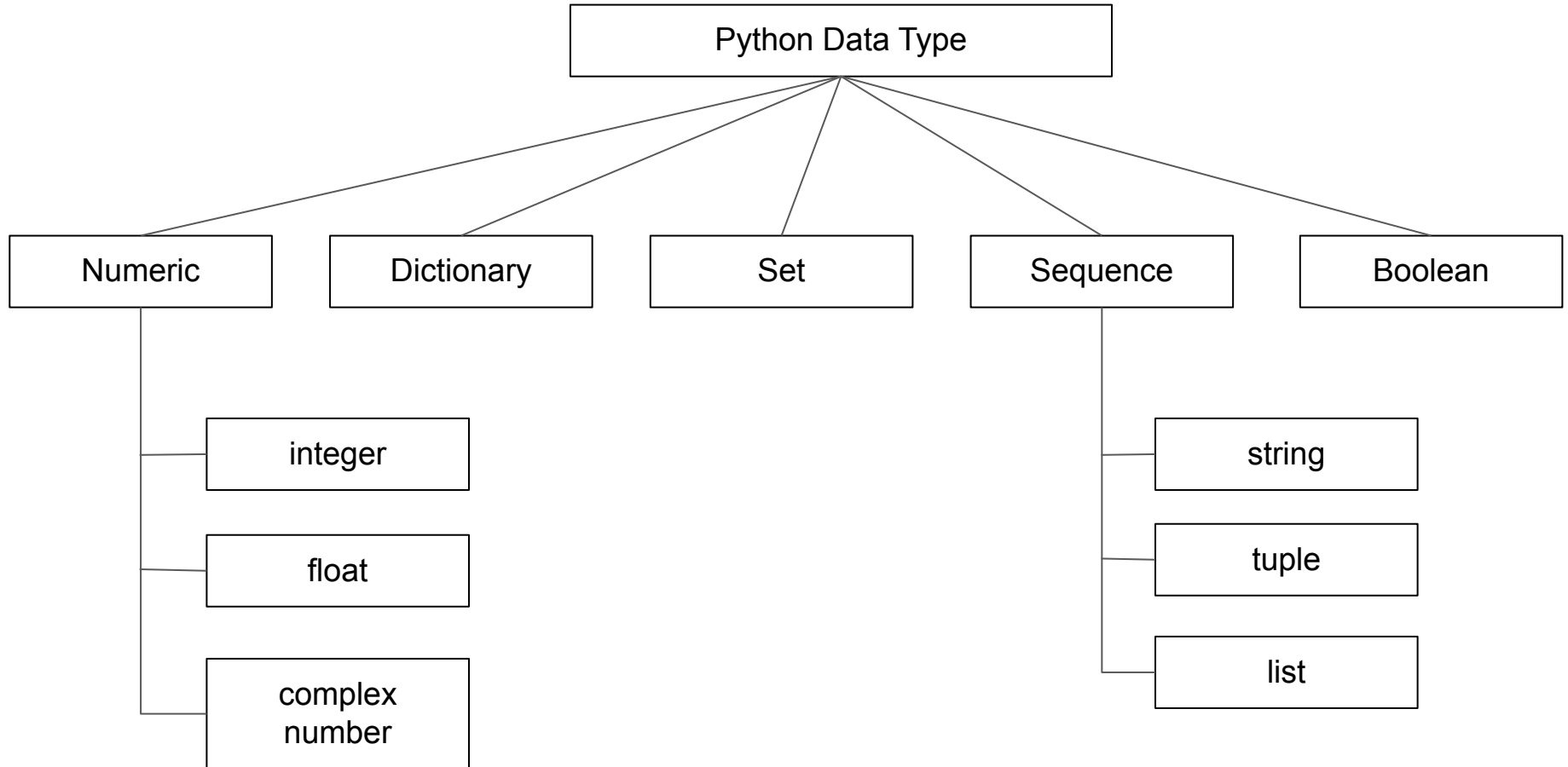


Semester review and exercise



dictionary

```
a= {'x': 1, 'y': 7}
```

```
for k, v in a.items():
```

```
    print(k, v)
```

```
for k in a.items():
```

```
    print(k)
```

```
for k in a:
```

```
    print(k)
```

string

```
s= 'this is a test'
```

```
for x in s:
```

```
    print(x)
```

Question1: how to print the reversed s, e.g., 'tset si a siht'

Question2: how to print the reversed individual words, e.g., 'siht si a tset'

integer

```
x = 3
```

```
y = 4
```

```
z = 5
```

```
a = x+y+z
```

```
print('the average is: ' + (a/3))
```

Question 3: what is wrong with this code?

float

`a = 15`

`b = 15.0`

`c = a + b`

Question 4: What will c be? What data type will it be?

list

Question 5: how to retrieve any value from a list of lists?

For example, if $A = [[1, 3, 2], [4, 5, 6]]$, how to get the **3** which is the **second** item of the **first** list, using the 1, 2 and A as the input?

boolean

```
x = 5
```

```
y = 7
```

```
print(x < y)
```

```
print(x == y)
```

```
print(x > y)
```

Question 6: what are the print result:

1. `print((x<y) and (x>y))`
2. `print((x<y) or (x>y))`

Set

```
A = {1,}
```

```
type(A)
```

```
A.add(2)
```

```
A.add(2)
```

```
print(A)
```

```
B = {1, 2, 3, 2, 1}
```

```
print(B)
```

```
for x in B:
```

```
    print(x)
```