Data Types

Integers

Declaration

```
num_1 = 15
num_2 = 10

print(num_1)
//Output = 15

print(num_2)
//Output = 10
```

Addition

```
num_1 = 15
num_2 = 10

print(num_1 + num_2)
//Output = 25
```

Subtraction

```
num_1 = 15
num_2 = 10

print(num_1 - num_2)
//Output = 5
```

Multiplication

```
num_1 = 15
num_2 = 10

print(num_1 * num_2)
//Output = 150
```

Division

```
num_1 = 15
num_2 = 10

print(num_1 / num_2)
//Output = 1.5
```

Modulo

```
num_1 = 15
num_2 = 10

print(num_1 % num_2)
//Output = 5
```

Exponentiation

```
num_1 = 15
num_2 = 10

print(num_1 ** num_2)
//Output = 576650390625
```

Flooring

```
num_1 = 15
num_2 = 10

print(num_1 // num_2)
//Output = 1
```

Data Types

Floats

Declaration

```
num_1 = 15.2
num_2 = 10.5

print(num_1)
//Output = 15.2

print(num_2)
//Output = 10.5
```

Addition

```
num_1 = 15.2
num_2 = 10.5

print(num_1 + num_2)
//Output = 25.7
```

Subtraction

```
num_1 = 15.2
num_2 = 10.5

print(num_1 - num_2)
//Output = 4.699999999999999
```

Multiplication

```
num_1 = 15.2
num_2 = 10.5

print(num_1 * num_2)
//Output = 159.6
```

Division

```
num_1 = 15.2
num_2 = 10.5

print(num_1 / num_2)
//Output = 1.4476190476190476
```

Modulo

```
num_1 = 15.2
num_2 = 10.5

print(num_1 % num_2)
//Output = 4.699999999999999
```

Exponent

```
num_1 = 15.2
num_2 = 10.5

print(num_1 ** num_2)
//Output = 2566596947523.0044
```

Flooring

```
num_1 = 15.2
num_2 = 10.5

print(num_1 // num_2)
//Output = 1.0
```

Data Types

Strings

Declaration

```
first_name = "Asoka"
last_name = "Wotulo"

print(first_name)
//Output = Asoka

print(last_name)
//Output = Wotulo
```

Concatenation

```
first_name = "Asoka"
last_name = "Wotulo"

name = first_name + last_name

print(name)
//Output = AsokaWotulo
```

Escape Key

```
first_name = "Asoka"
last_name = "Wotulo"

name = first_name + "\b" + last_name

print(name)
//Output = AsokWotulo

name = first_name + "\n" + last_name

print(name)
//Output = Asoka
Wotulo
```

Data Types

Lists

Declaration

```
names = ["Asoka Wotulo", "Samuel Putra",
"Excelino Fernando"]

print(names)
//Output = ["Asoka Wotulo", "Samuel Putra",
"Excelino Fernando"]
```

Index

```
names = ["Asoka Wotulo", "Samuel Putra",
"Excelino Fernando"]

print(names[0])
//Output = "Asoka Wotulo"

print(names[1])
//Output = "Samuel Putra"

print(names[2])
//Output = "Excelino Fernando"
```

Updating

```
names = ["Asoka Wotulo", "Samuel Putra",
"Excelino Fernando"]

names[0] = "Some random name"

print(names[0])
//Output = "Some random name”
```

Deleting

```
names = ["Asoka Wotulo", "Samuel Putra",
"Excelino Fernando"]

del names[0]

print(names)
//Output = ["Samuel Putra", "Excelino
Fernando"]
```

Slicing

```
names = ["Asoka Wotulo", "Samuel Putra",
"Excelino Fernando"]

print(names[0:2])
//Output = ["Asoka Wotulo", "Samuel Putra"]

print(names[0:3:2])
//Output = ["Asoka Wotulo", "Excelino
Fernando"]
```

Slicing

```
name = "AsokaWotulo"

print(name[5:])
//Output = okaWotulo

print(name[5:0:-1])
//Output = Wakos

print(name[0:-1:2])
//Output = Aoaou

print(name[-1])
//Output = o
```

Data Types

Tuples

Declaration

```
names = ("Asoka Wotulo", "Samuel Putra",
"Excelino Fernando")

print(names)
//Output = ("Asoka Wotulo", "Samuel Putra",
"Excelino Fernando")
```

Differences

Cannot be changed

Data Types

Dictionary

Declaration

```
asoka = {"name": "Asoka", "Age": 19,
"Condition": "Sleepy"}

print(asoka)
//Output = {"name": "Asoka", "age": 19,
"condition": “Sleepy"}
```

Accessing

```
asoka = {"name": "Asoka", "age": 19,
"condition": "Sleepy"}

print(asoka["condition"])
//Output = "Sleepy"

print(asoka["age"])
//Output = 19

print(asoka["name"])
//Output = “Asoka"
```

Differences

Over-glorified list