VARIABLES PART3 (DICTIONARIES)

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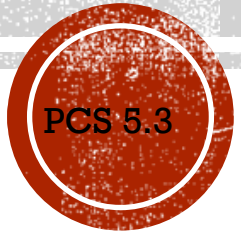
Programming And Scripting



Variable type	Create	Function
int float complex	i = 3 fl = 3.2 x = 1j	int() float()
str	name = ‘ Joe’ name = “Joe”	str()
bool	ready = true ready = false	bool
list tuple range	ages = [ ] months = ( ) x = range(10)	
dict	person = { }	
Set, frozen set	months = { }	
Bytes, bytearray, memoryview	X = b”hello”	

DICT

- Defined by

```
x = {}
```

```
x = { “var1” : “value1”, “var2”: 123, “var3” : [], “var4”: {} }
```

- Add/ access values with square brackets

```
x[“var1”] = “newValue”
```

```
print (x[“var1”] )
```

- Can have any variable type as a value, so we can have dicts in dicts

```
x[“var4”][“someKey”] = aValue
```

- Use the get function if you are not sure that the key exists
- Use the update function if want to add key values using the format {}

EXAMPLE

Data is of type Dictionary

Tags is of type Array

```
sampleRequest={
    "Data": {
        "Tags": ['debit', 'checking'],
        "InstructedAmount": {
            "Amount": 100,
            "Currency": "GBP"
        },
        "DebtorAccount": {
            "Identification": "30130900103004",
            "Name": "DName"
        },
        "CreditorAccount": {
            "Identification": "30180500016825",
            "Name": "CName"
        },
        "Risk": "Risk"
    }
}
print(sampleRequest['Data']['InstructedAmount']['Amount'])
```

Amount is an int in an Dictionary which is in a dictionary

LOOPING DICTIONARIES

- By keys

```
for x in thisdict:
    print(thisdict[x])
```

- By keys and values

```
for x, y in thisdict.items():
    print(x, y)
```

GO FOR A WALK