

Introduction to python

Variables

```
name = "Paul" #This is string Data  
print(name)
```

Paul

```
age = 48 #Whole number - integer  
print(age)
```

48

```
money = 3.04 #decimal  
print(money)
```

3.04

```
#what other data types do you know  
  
num = 1  
num2 = "1"  
#Whats the difference
```

Basic operations

In this section we will look at using arithmetic with variables

```
#addition with numbers  
  
a = 4  
b = 6  
c = a + b  
print(c)
```

10

```
#addition with strings  
fname = "Paul"  
sname = " Smith"  
fullname = fname + sname  
print(fullname)
```

Paul Smith

```
#what about this - it gives us an error message - why?  
n = 1  
n2 = "3"  
ansewer = n + n2  
print(answer)
```

TypeError

Traceback (most recent call last)

```
<ipython-input-7-840596029485> in <module>
      2 n = 1
      3 n2 = "3"
----> 4 ansewer = n + n2
      5 print(answer)
```

TypeError: unsupported operand type(s) for +: 'int' and 'str'

Conditions - choices

Sometimes your code will need to branch or split off depending on what is happening.

```
#using if statments

height = 170 #eg 170 cm

if height > 160:
    print("You are tall enough")
else:
    print("Sorry you are not tall enough")
```

You are tall enough

```
# use if statments with strings - eg for passwords
# this time we use the == to test if something is equal

password = "safe"

if password == "safe":
    print("you can enter")
else:
    print("access denied")
```