

Variables

Think of this like a box to store something. Its an area of the computers memory to store words, or values etc.

```
# String Variables - this is text
name = "Paul"
film = "2001 Space Odyssey"
car = "VW"

print(film) #print out to the conslse below
```

2001 Space Odyssey

```
# number variables
n = 30
age = 48
money = 3.26 # covert into "3.26" to print

notmoney = "4.50" # this is not a number, its a string of text and cant be used for calculation

print(age)

#if you want to print with a string character, we must change the number into a string.
print( "£" + str(money))
```

48
£3.26

Arithmetic

Python can perform many different calculations.

```
a = 5
b = 6
c = a + b # add 5 and 6

print(c)
```

11

```
d = 0.2
e = 2.3
f = 1.4
g = d+e+f
print(g)
```

3.9

You can work with different operators

add + subtract - divide / multiply * brackets () powers ** modulo %

```
a = 5
b = 2
```

#remeber BIDMAS or BODMAS

```
print(a * b)
print(a / b)
print( a + b * b)      #this will do b * b first then add a
print( (a + b) * b )   #add a and b first, the times by b
print( a**2 )          #this is a squared, a to the power of 2
```

The next part is optional but useful to know.

#modulo is the remainder

```
a = 5
b = 2
```

```
print(a%2)
#this means if you divide 5 by 2, there will be 1 left over
#2 goes into 5 two times, with 1 left. This is the modulo
```

```
#you can use it with time
time = 15
h = 12
```

```
print(time % h)
#this will print 3, as 15 / 12 is 1 remainer 3. This is converting 24 hour in 12 hour clock.
```

1
3