

1. Under the programming tab select Python IDLE 2
2. Click **File... New File...**
3. In the blank window type the following:

```
number1 = 8
number2 = 4
number3 = 2

print number1 + number2
print number2 - number3
print number1 / number2
print number3 * number2
```

4. Click **File... Save As** and save your program as Python1
5. Click **Run** and then **Run Module** or just press **F5...**
6. You should see the following on the screen, this is the output from your program:

```
===== RESTART: C:/Python27/Python1.py =====
12
2
2
8
```

7. Now it is time to write some new code:

Create a program that:

- creates a variable called num1 that is equal to 4
- creates a variable called num2 that is equal to 7
- creates a variable called num3 that is equal to 12
- prints the equation num1 + num3
- prints the equation num3-num2
- prints the equation num3 * num2 * num1

Your code should look like this:

```
num1 =4
num2 = 7
num3 = 12

print num1 + num3
print num3 - num2
print num3 * num2 * num1
```

8. Now it is time to create another program:

Create a program that:

- creates a variable called length that is equal to 5
- creates a variable called width that is equal to 7
- creates a variable called area that is equal to length * width
- prints the variable area to the screen (**print area**)

So far the programs that you have written have all used data that was set up within the program. It is possible to write programs that actually receive data that is typed on the keyboard by the user.

The code to receive data from the user is `raw_input()`

When you get the data from the keyboard you have to specify what kinds of data it is.

Python Data Types

You can get three types of data from the user:

An integer: a positive or negative number that does not have decimals

A float: a positive or negative number that has decimals

A string: a series of letters or characters

Take a close look at the program below, it asks the user for their age (which is an integer), their weight in kilograms (which is a float) and their name (which is a string):

```
File Edit Format Run Options Window Help
print "----SUPER PROGRAM----"

print "Please enter your age:"
age = int (raw_input())

print "Please enter your weight in Kilograms:"
weight = float (raw_input())

print "Please enter your name:"
name = raw_input()

print "Hi there", name, "you are", age , "years old and you weigh", weight, "kilograms."
```

To read in an integer you need to indicate the name of the variable, then an equals sign, then `int (raw_input())`
For example: `age = int (raw_input())`

To read in a float you need to indicate the name of the variable, then an equals sign, then `float (raw_input())`
For example: `weight = float (raw_input())`

To read in a string you need to indicate the name of the variable, then an equals sign, then `raw_input()`
For example: `name = raw_input()`

Your task is to now open python and recreate the age, weight and name program on the other side of the page.

When complete, try to write the following programs:

- 1) A program that asks the user for their name, their class average (with decimals) and the number of courses they are taking. The program will then output a message like:
Hello Jen, you are taking 3 courses and your class average is 79.8%
- 2) A program that asks the user for their school name, the number of kms between school and their house (with decimals) and then outputs a message like:
Hello Eric, your school is called CCH and it is 5.7 kms from your house.
- 3) A program that asks the user to enter two numbers (no decimals).
The program then outputs the message:
You chose 6 and 9
Added together they make: 15
Multiplied they make: 54