## **Python - Input**

Dim (Dimension) statements are used in programs to create comments for programmers. These statements are not executable – in other words they are ignored when the program is run.

```
#Assign 1-2 - H:/My Documents/Classes/TEJ 20/Unit 4 - Python/Assign 1-2*

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# This is an example of a Dim statement

# my name

# Nov 5

num1 = 10

num2 = 4

print num1, " + ", num2, " = ", num1+num2
```

## # - this denotes a DIM statement

## **Getting Input from the Keyboard**

There are 2 commands used to prompt the user of the program to enter Input from the keyboard:

```
\begin{array}{ccc} \text{input()} & \to & \text{used for numbers} \\ \text{raw\_input()} & \to & \text{used for text} \end{array}
```

A print statement (telling the user what to input) should always be in front of an input() statement

Enter the following program and run it:

```
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# This is an example of a Input Statements

print "Enter a Number"

x = input()
print "Enter a Second Number"
y = input()
print "Your numbers Added = ", x+y

Ln: 8 Col: 0
```

Without input statements, we have to go into the program to change the values.

## Adding Text:

Enter the following program and run it:

```
*Assign 2-4 - H:/My Documents/Classes/TEJ 20/Unit 4 - Python/Python Programs/Assign 2-4*

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print "Enter your first name"

x = raw_input()

print "Enter you last name"

y = raw_input()

print "Hello ", x+y
```

- \* we are using raw-input() instead of input(), because are answers will be text
- \* Text is added by Python, by sticking them together
- \* To get a space in the output (between the First and Last names), change the last line of the program:

\* Try putting a comma after the "" in the print statement. See how it changes where the input is:

```
**Assign 2-4 - H:/My Documents/Classes/TEJ 20/Unit 4 - Python/Python Programs/Assign 2-4*

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print "Enter your first name",

x = raw_input()

print "Enter you last name",

y = raw_input()

print "Hello", x + " " + y

Ln: 6 Col: 0
```

```
Assignment #2
```

Use # (DIM) statements in all your programs! The first 3 lines should be # statements :

```
# Assign Number
# Your Name
# Date
```

1. Rewrite Assign 1-1 (Pizza program), so that the *Cost* (Cost per Slice) and *Num* (Number of Slices) are inputted from the keyboard. Save as "Assign 2-1"

- 2. Rewrite Assign 1-2, so that the 2 numbers used in the program are inputted from the keyboard. Save as "Assign 2-2".
- 3. Write a program that prompts the user for their Title, First name, Surname, Telephone area code, and Phone number. Input each piece of information on a separate line.

4. The formula to calculate the area  $Area = \pi r^2$  or Area = 3.14\*r\*\*2. Create a program that prompts the user to input the radius of a circle and displays the Area. Save as "Assign 2-4". The Output should look like:

```
Area of a Circle
-----

Enter the radius of a circle (in cm) : 10

The Area of the circle is 314 cm2
```

5. The height of an object at any given time from a starting height of 100 metres is given by the equation  $h = 100 - 4.9t^2$  where t is the time in seconds. Create a program that prompts the user for both the starting height in metres and the time in seconds and then displays the height of the object at that time. \* Save as "Assign 2-5". Your program could look as follows:

```
Object Height
-----
Enter the starting height in metres: 100
Enter the time in seconds: 2
The height of the object is 80.4 meters
```