Pseudo to Python example

- **2 Adder Program**

- Select a line of pseudo code

- Using the pseudo code to python cross reference table determine the target python code

  - Pseudo code Lesson 2 Notebook

- Add that line to the program

  - May have to change variable name(s)

  - May have to add some suitable python syntax

- Worked example follows

2. Adder

total AS INTEGER
total ← 0
OUTPUT "How many number
INPUT nums as INTEGER
FOR x = 1 TO nums
    INPUT num AS INTEGER
    total ← total + num
END FOR
OUTPUT total

Pseudocode	Python
x AS INTEGER x ← 0	x = 0
x ← 4	x = 4
y ← x * 7	y = x * 7
OUTPUT x	print(x)
INPUT x	x = input()

IF x = 4 THEN
    y = 8
ELSE
    y = 6
END IF
	if x == 4:
	    y = 8
	else:
	    y = 6

SELECT x
    CASE 1:
        OUTPUT a
    CASE 2:
        OUTPUT b
    CASE 3:
        OUTPUT c
    CASE ELSE:
        OUTPUT d
END SELECT
	if x == 1:
	    print(a)
	elif x == 2:
	    print(b)
	elif x == 3:
	    print(c)
	else:
	    print(d)

WHILE x > 4 DO
    x ← x - 1
END WHILE
	while x > 4:
	    x = x -1

FOR x = 1 TO 5
    y ← y + x
END FOR
	for x in range(1,5):
	    y = y + x

PROCEDURE square (x AS INTEGER)
    x ← x * x
    OUTPUT x
END PROCEDURE
	def square(x):
	    x = x * x
	    print(x)

Python 3.4.1: Untitled

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```
# 2. Adder
total=0
```

2. Adder

```
total AS INTEGER
total ← 0
OUTPUT "How many numbers to add?"
INPUT nums as INTEGER
FOR x = 1 TO nums
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    total ← total + num
END FOR
OUTPUT total
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File Edit Format Run Options Windows Help

```
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print(" How many numbers to add ? ")
```
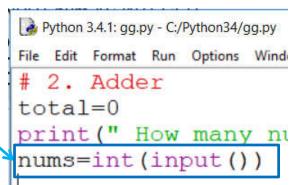
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Python 3.4.1: gg.py - C:/Python34/gg.py

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```
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print(" How many nu
nums=int(input())
```

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```
File  Edit  Format  Run  Options  Windows  Help
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total=0
print(" How many numbers
nums=int(input())
for x in range (0,nums):
    num=int(input())
    total = total + num
print("total :"total)
```

Completed Adder Program

- Python Program

```
#2. Adder
total=0
print(" How many numbers to add ? ")
nums=int(input())
for x in range (0,nums):
    num=int(input())
    total = total + num
print("total :",total)
```

- Example running the program for adding 3 numbers

```
>>>
 How many numbers to add ?
3
4
6
8
total : 18
>>> |
```