**Presentation Notes:**

1. What are the two main parts of a computer architecture?
   1. To store some data for use in the future
   2. To read some data that was previously stored
2. Google “basic Python commands” and list four commands.
   1. Print
   2. If
   3. Continue
   4. finally
3. Identify the two *syntax errors* in the following command: **Print ("This command prints messages)**
   1. These***Syntax Errors*** prevent a program from running
   2. Most ***Syntax Errors*** are highlighted in the program editor window
4. Summarize the cause and effect of a *syntax error*.

* It’s because something is wrong with what you have copied down on the white page, such as capital letters, or these types of commas (‘’)

1. Explain what happens if you use a variable before it is defined.

* You get a run time error.

1. Summarize the cause and effect of a *run-time* error.

* You see syntax error and red color message.

1. Write a Python statement to assign the value of 24 to the variable class Size.

* Class size=24

1. Create a valid Python variable name to store a student exam mark and that follows the “mixed Case” style guidelines.

* Lower case ‘e’ and then call it, exam Mark.

1. Create a valid Python variable name to store a student exam mark and that DOES NOT follow the “mixedCase” style guidelines.

* All capitals

1. Write a mathematical expression that assigns a value of 62 to the variable myAnswer.
   1. aNumber = 22
   2. myAnswer = 62

1. Write a mathematical expression that uses the variable aNumber and assigns a value of 77 to the variable myAnswer.
   1. aNumber = 37
   2. myAnswer = 77
2. Change the program on the last slide of the presentation to calculate and print out the cube (power 3) of an input number.

* The square of 3 is 9

**Student Questions:**

A resource for Python Style guidelines mal be found here:

[https://www.python.org/dev/peps/pep-0008/#naming-conventions](https://www.python.org/dev/peps/pep-0008/)

1. Identify which of the following are valid Python variable names (even if they do not follow the mixedCase style guidelines).

|  |  |
| --- | --- |
|  | True / False |
| StudentNumber | True |
| 5thRow | True |
| else | False |
| break | False |
| Row\_5 | True |

1. Identify which of the following are valid Python variable names that also follow the mixedCase style guidelines.

|  |  |
| --- | --- |
|  | True / False |
| StudentNumber | True |
| studentNumber | True |
| row | False |
| row5 | False |
| Row5 | False |

1. Summarize the difference between a *syntax error* and a *run-time* error.

* TheSyntax Errorsprevent a program from running and most of the syntax error are being highlighted,
* But however in the run-time error you see syntax error as well as a red color message.

1. Write an expression that calculates the cost of 6 slices of pizza at 2 dollars a slice assigns the result to a variable in RAM memory. Use proper style and meaningful names for your variables.

aNumber = 6

myAnswer = aNumber + 3 \* 2

print("The answer is:",myAnswer)

(The answer is 12)

1. Write an expression that calculates the cost of a variable number slices of pizza at 2 dollars a slice assigns the result to a variable in RAM memory. Use proper style and meaningful names for your variables.

pizzaslices= int(input( "how many slices"))

pizzacost =2

print(pizzacost \* pizzaslices )

#print("slices %d, price %d" %( pizzaslices, pizzaprice))

1. Write a program that gets the number of slices from the console input, uses your expression in #5 above, and prints out the result to the console output. Use proper style and meaningful names for your variables and meaningful messages for your input and print commands.

pizzaslices= int(input( "how many slices"))

pizzacost =2

print(pizzacost \* pizzaslices )

#print("slices %d, price %d" %( pizzaslices, pizzaprice))

1. Extend your program in #6 above to also calculate and print out the number of boxes of pizza if each box contains 8 slices.

how many slices= 8

myAnswer= 16