**Presentation Notes:**

1. What are the two main parts of a computer architecture?
   1. RAM Memory
   2. CPU Processor
2. Google “basic Python commands” and list four commands.
   1. Print
   2. Input
   3. Yield
   4. Return
3. Identify the two *syntax errors* in the following command: **Print ("This command prints messages)**
   1. Make the P in Print lower case
   2. Quotation mark in the end of code
4. Summarize the cause and effect of a *syntax error*.

The cause of the Syntax error could possibly be wrong use of coding, typo in the code you have used. The effect is that is uses red coding font in the black background area, which tells us it is a Syntax Error.

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

If you use a variable before it is defined, then this results in a Run-Time program error.

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

The cause of a Run-Time program error is when a variable isn’t defined before they are used in Python, the effect is that the program runs without crashing.

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

classSize = 24

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

examMarkIcs

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

exammarkIcs

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

1. Write a mathematical expression that uses the variable aNumber and assigns a value of 77 to the variable myAnswer.
   1. aNumber = 3
   2. myAnswer = aNumber + 10 \*4
2. Change the program on the last slide of the presentation to calculate and print out the cube (power 3) of an input number.

Value2 = value \*\* 3

**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 | False |
| else | True |
| break | True |
| Row\_5 | True |

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

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

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

A syntax error is the wrong use of coding or typo in the code you have used, but a run-time error is a program error is when a variable isn’t defined before they are used in Python.

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.

slice = 6 \* 2

print(slice)

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.

slice = 6

print(slice \* 2)

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.

value = int(input("Enter a number:"))

value2 = value \* 2

print("The total cost of %d slices is %d dollars " % (value,value2))

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.

value = int(input("Enter a number:"))

value2 = value \* 18

print("The total cost of %d boxes is %d dollars " % (value,value2))