**Presentation Notes:**

1. What are the two main parts of a computer architecture?
   1. RAM
   2. CPU
2. Google “basic Python commands” and list four commands.
   1. def
   2. del
   3. assert
   4. yield
3. Identify the two *syntax errors* in the following command: **Print("This command prints messages)**
   1. No end quote
   2. Capitalized “Print”
4. Summarize the cause and effect of a *syntax error*.

Prevents the program from working and gives a syntax error. A Syntax error means there is a typo in your lines of code.

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

You get an error because the program does not know the value of the variable.

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

Prevents program from running. Things have been typed correctly, but you used a variable before it was defined.

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.

**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 | Trie |
| 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 | False |
| row5 | False |
| Row5 | False |

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

In a syntax error, you have entered something incorrectly. Whereas in a run-time error, everything you have typed in is correct, you have just typed in something (such as a variable) before it has been defined.

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.

value = int(input("The amount of slices is:"))

value2 = value \*2

print("The price of %d is %d" % (value,value2))

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.

value = int(input("The amount of slices is:"))

value2 = value \*2

print("The price of %d is %d" % (value,value2))

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("The amount of slices is:"))

value2 = value \*2

print("The price of %d is %d" % (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("The amount of boxes is:"))

value2 = value \*16

print("The price of %d is %d" % (value,value2))