**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. Else
   4. CMD
3. Identify the two *syntax errors* in the following command: **Print("This command prints messages)**
   1. “p” is not capital in the start
   2. And there no quotation at the end of message
4. Summarize the cause and effect of a *syntax error*.

Any typo or missing letters and if your code doesn’t work you would get an error message

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

You get a runtime error

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

An error that occurs during the execution of a program. In contrast, compile-time errors occur while a program is being compiled. Runtime errors indicate bugs in the program or problems that the designers had anticipated but could do nothing about.

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

It will be classSize=24 that will make the classSize have the value of 24

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

For that to follow you would have exam lowercase M uppercase for Mark examMark

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

The variable that doesn’t follow style guidelines is that it will be all capitals that way it won’t follow the guidelines

1. Write a mathematical expression that assigns a value of 62 to the variable myAnswer.
   1. myAnswer = 3+10\*4

1. Write a mathematical expression that uses the variable aNumber and assigns a value of 77 to the variable myAnswer.
   1. aNumber = 11
   2. myAnswer = aNumber\*7
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 | 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 | False |
| studentNumber | True |
| row | True |
| row5 | True |
| Row5 | False |

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

A program with a syntax error cannot be executed. The program with a runtime error can be executed but dumps under certain conditions.

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.

CostOfPizza6\*2

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.

costOfPizza = 2 \* numberOfSlices

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.

numberOfSlices = int(input("Enter a numberOfSlices:"))

costOfPizza = 2 \* numberOfSlices

print("The cost is:",costOfPizza)

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.

numberOfSlices = int(input("Enter a numberOfSlices:"))

costOfPizza = 2 \* numberOfSlices

print("The cost is:",costOfPizza)

print("The number of boxes is:",numberOfSlices/8)