**Presentation Notes:**

1. What are the two main parts of a computer architecture?
   1. Ram memory
   2. CPU chip
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. Capital “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.

Run-time error means you typed everything correctly, although you used something before it was defined. Such as a variable before it was defined. The effect of a run-time error prevents you program from running and you get red text.

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.

exam Mark ics

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

exam mark ics

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 | 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 | False |
| row5 | False |
| Row5 | False |

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

A syntax error is when a misspelling or a typo in the program occurs whereas a run-time error is when a variable is not given a value and/or meaning.

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.

Variable is “numberofslices”, which is the amount of slices that needed to be bought (6), multiplied the cost of each slice, (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.

The variable I made is “slice” which is the amount of slices that need to be bought (if two slices need to be bought it will). The expression created is 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"  % (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.
2. value = int(input("Enter a number:"))
3. value2 = value \* 16
4. print("The total cost of %d boxes is %d"  % (value,value2))