**Presentation Notes:**

1. What are the two main parts of a computer architecture?
   1. CPU
   2. Ram Memory
2. Google “basic Python commands” and list four commands.
   1. Print
   2. Input
   3. Return
   4. W3hile
3. Identify the two *syntax errors* in the following command: **Print("This command prints messages)**
   1. The p in the print command must be lower cased
   2. Needed to add second quotation at the end
4. Summarize the cause and effect of a *syntax error*.

Typo or wrong way to say language

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

Error code run time. The cause of it is using a variable before it defined, then the program won’t run and it will display red in it.

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

The cause of the run time was because there was no defined answer and the effect is the error.

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 = 3+10\*4 = 43

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 = 9+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.

value = int(input( 24 ))

value2 = value \*\* 3

print("The square of %d is %d" % (value,value2

**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.

**The difference between them is that in a run time, the code is correct, but the value of the variable has not been defined or is written post-luminary to the use of the variable. In a syntax error, there is a conflict between the code, this can range from common spelling mistakes to missing quotation marks.**

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.

**NumberOfSlices = float (6)**

**CostOfSlices = float (2)**

**TotalCostOfPizza = NumberOfSlices\*CostOfSlices**

**print (totalCostOfPizza)**

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.

**NumberOfSlices= float (8)**

**CostOfSlices= float (2)**

**TotalCostOfPizza= NumberOfSlices\*CostOfSlices**

**print (totalCostOfPizza)**

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( 8 )

CostOfSlices = float (2)

TotalCostOfPizza = NumberOfSlices \* CostOfSlices

print (totalCostOfPizza)

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( ) )

CostOfSlices = float ( 2 )

TotalCostOfPizza = NumberOfSlices \* CostOfSlices

BoxesOfPizza = NumberOfSlices / 8

print (totalCostOfPizza)

print (BoxesOfPizza)