**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. while
   3. input
   4. return
   5. try
3. Identify the two *syntax errors* in the following command: **Print("This command prints messages)**
   1. Print has capital “P”
   2. No quotation mark at the end of message
4. Summarize the cause and effect of a *syntax error*.

A syntax error could be caused by a typo or not following the rules of language. The result of this is a red error sign shown in the console output screen (black screen).

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

Use of an undefined variable results in a **Run-Time** program error.

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

A run-time error could be caused by a undefined variable. The result of this is a red error sign shown in the console output screen (black screen).

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

classSize=24

print("the answer is",classSize)

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

studentExamMark

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

Studentexammark

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

myAnswer = 40+22

print("the answer is",myAnswer)

1. Write a mathematical expression that uses the variable aNumber and assigns a value of 77 to the variable myAnswer.

aNumber=7

myAnswer = aNumber+70

print("the answer is",myAnswer)

1. 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("Enter a number:"))

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 | T |
| 5thRow | F |
| else | T |
| break | T |
| Row\_5 | T |

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

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

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

A syntax error is a language mistake and a run-time error is a undefined variable error.

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.

totalCost = 6 \* 2

print(totalCost)

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.

totalCost = 4 \* 2

print(totalCost)

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 \* 16

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