**Unit 2 Links to Kahoots and Unit Tests**

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| Flowchart Shapes | <https://create.kahoot.it/share/firia-labs-ap-csp-flowchart-shapes/883d78ee-287d-46b9-bfdb-935a958f6320> |
| Mission 6 | <https://create.kahoot.it/share/firia-labs-mission-6/7bf069b2-892b-4db9-89f7-10738cbdbc63> |
| Mission 7 | <https://create.kahoot.it/share/firia-labs-mission-7/06203065-5a87-41df-8449-e6381da62196> |
| Mission 8 | <https://create.kahoot.it/share/firia-labs-mission-8/6df93bf9-a83a-444e-929d-65b187437f64> |
| Unit 2 Vocabulary Review | <https://create.kahoot.it/share/firia-labs-unit-2-vocab-review/f220ea96-9dba-4b97-a455-b53e6d41fc4e> |
| Unit 2 Coding and Concepts Review | <https://create.kahoot.it/share/firia-labs-unit-2-code-review/9d98b7a4-baf5-401a-bb02-ed18769d06a8> |
| Unit 2 Vocabulary Test (MS Form) | <https://forms.office.com/Pages/ShareFormPage.aspx?id=DQSIkWdsW0yxEjajBLZtrQAAAAAAAAAAAAO__SjBvJpUNUs5UUNLRFk5QkQzSUpaTjZLMVhBNUoyTi4u&sharetoken=WA3aCy361dVDomqM53gb> |
| Unit 2 Coding and Concepts Test (MS Form) | <https://forms.office.com/Pages/ShareFormPage.aspx?id=DQSIkWdsW0yxEjajBLZtrQAAAAAAAAAAAAO__SjBvJpUOVFOSUxNMzE5Mlg1OE9FVUVWMVg1VE9NQy4u&sharetoken=mCAscl69g01EGKsCP2lN> |

**Unit 2 Question Bank: Kahoot Reviews and Microsoft Forms Exams**

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| **Flowchart Shapes Kahoot Review** | |
| What flowchart shape should be used for this code: | 1. **B**.   C.  D. |
| What flowchart shape should be used for this code: | 1. B.   **C**.  D. |
| What flowchart shape should be used for this code: | 1. **B.**   C.  D. |
| What flowchart shape should be used for this code: | 1. B.   C.   **D.** |
| What flowchart shape should be used for this code: | 1. **B.**   C.  D. |
| What flowchart shape should be used for this code: | 1. B.   **C.**  D. |
| What flowchart shape should be used for this code: | 1. **B.**   C.  D. |
| What flowchart shape should be used for this code: | 1. B.   **C.**  D. |
| What flowchart shape should be used for this code: | 1. **B.**   C.  D. |
| What flowchart shape should be used for this code: | 1. B.   C.   **D.** |
| What flowchart shape should be used for this code: | 1. B.   **C.**  D. |
| What flowchart shape should be used for this code: | 1. B.   **C.**  D. |
| What flowchart shape should be used for this code: | 1. B.   **C.**  D. |
| What flowchart shape should be used for this code: | 1. **B.**   C.  D. |
| What flowchart shape should be used for this code: | 1. B.   C.   **D.** |

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| **Mission 6 Kahoot Review** | |
| What will the code segment do? | 1. Display the happy face only 2. Display the heart very quickly and then the happy face 3. Display the heart only 4. Display each image for about 1 second each |
| What is the definition of “loop”? | 1. Repeats a block of code, subject to a condition 2. A series of code that runs one line at a time 3. An expression that evaluates to True or False 4. Decision points in code |
| What is the definition of “condition”? | 1. Repeats a block of code, subject to a condition 2. A series of code that runs one line at a time 3. An expression that evaluates to True or False 4. Decision points in code |
| What is the data type of this value: ‘robot’ | 1. Integer 2. Float 3. String 4. Boolean |
| What is the data type of this value: 15 | 1. Integer 2. Float 3. String 4. Boolean |
| What is the data type of this value: 0.5 | 1. Integer 2. Float 3. String 4. Boolean |
| What is the data type of this value: True | 1. Integer 2. Float 3. String 4. Boolean |
| What does the ‘break’ statement do? | 1. Causes the code to stop 2. Crashes the program 3. Jumps over the next line of code 4. Breaks out of the loop |
| What is the correct code for using a break statement? | 1. **B.**   C.  D. |
| What is “increment”? | 1. Assigning a value to a variable 2. Causing an error in code 3. Increasing the value of a variable by a set amount 4. Decreasing the value of a variable by a set amount |
| What is “decrement”? | 1. Assigning a value to a variable 2. Causing an error in code 3. Increasing the value of a variable by a set amount 4. Decreasing the value of a variable by a set amount |
| What is the final value of ‘number’? | 1. number = 5 2. number = 2 3. number = 3 4. An error occurs |
| What code will increment ‘number’ by 1? | 1. number = value + 1 2. number = number + 1 3. number = number - 1 4. value = number + 1 |
| Why does the heartbeat blink slower when you add time? | 1. A larger delay in the loop cycle makes a slower blink rate 2. A smaller delay in the loop cycle makes a slower blink rate 3. Positive numbers are always slower than negative ones 4. Larger hearts beat slower than smaller ones |
| Why do you get a runtime error when you decrement ‘delay’ too many times? | 1. The display can’t run that fast 2. Too small a delay creates a time vortex 3. The CodeX can’t keep up with too many button presses 4. The delay will go below 0 and sleep() can’t handle negative numbers |

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| **Mission 7 Kahoot Review** | |
| What does this code do? | 1. Compares choice to 0, branching when choice is less than 0 2. Gives an error message 3. Compares choice to 0, branching when choice is equal to 0 4. Assigns the variable choice the value 0 |
| What does this code do? | 1. Compares choice to 0, branching when choice is less than 0 2. Gives an error message 3. Compares choice to 0, branching when choice is equal to 0 4. Assigns the variable choice the value 0 |
| What does this code do? | 1. Compares choice to 0, branching when choice is less than 0 2. Gives an error message 3. Compares choice to 0, branching when choice is equal to 0 4. Assigns the variable choice the value 0 |
| What is the result if BTN\_R is pressed? | 1. ‘choice’ is assigned the value 0 2. ‘choice’ is assigned the value 4 3. ‘choice’ is assigned the value 3 4. An error occurs |
| What code will give the number of items in a list? | 1. str(my\_list) 2. items(my\_list) 3. get\_items(my\_list) 4. len(my\_list) |
| What is the first index of every list? | 1. 0 2. 1 3. A 4. len(my\_list) - 1 |
| What is the last index of every list? | 1. len(my\_list) 2. Depends on the number of items 3. Z 4. len(my\_list) - 1 |
| Given this list, what are the values of the index? | 1. 1, 2, 3, 4, 5 2. 5, 9, 1, 4, 6 3. 0, 1, 2, 3, 4 4. len(my\_list) |
| Given this list, what is the value of my\_list[0]? | 1. 5 2. 9 3. 6 4. An error occurs |
| Given this list, what is the value of my\_list[1]? | 1. 5 2. 9 3. 1 4. An error occurs |

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| **Mission 8 Review Kahoot** | |
| What is the definition of “list”? | 1. A number that keeps track of what item is accessed 2. An individual element in a list 3. A sequence of items you can access with an index 4. A built-in function that gets a random number |
| What is the definition of “index”? | 1. A number that keeps track of what item is accessed 2. An individual element in a list 3. A sequence of items you can access with an index 4. A built-in function that gets a random number |
| What is the definition of “item”? | 1. A number that keeps track of what item is accessed 2. An individual element in a list 3. A sequence of items you can access with an index 4. A built-in function that gets a random number |
| Given the code, what is the ‘count’ variable doing? | 1. Automatically scans the list and returns the number of items 2. Stores the number of items in the list to use in the randrange function 3. Selects an item from the list and displays it on the screen 4. Selects a random number between 0 and the number of items in the list |
| Given the code, what is the ‘index’ variable doing? | 1. Automatically scans the list and returns the number of items 2. Stores the number of items in the list to use in the randrange function 3. Selects an item from the list and displays it on the screen 4. Selects a random number between 0 and the number of items in the list |
| How can you change the size of text when displayed? | 1. display.print(text, scale=3) 2. display.scale(text, 3) 3. display.show(text, size=3) 4. display.print(text, size=3) |
| Given this command, what are the possible values of ‘index’? | 1. 1, 2, 3, 4 2. 0, 1, 2, 3 3. 0, 1, 2, 3, 4 4. An error will occur |
| Which command will give a random number between 0 and 6? | 1. random.randrange(6) 2. random.randrange(5) 3. random.randrange(7) 4. random.randrange(0, 6) |
| What does this command do? | 1. Selects a random item from list “answers” 2. Selects a random item from “my\_choice” 3. Selects a random number between 0 and 6 4. Will cause an error |
| What is the result of this code? | 1. Assigns my\_choice the value 6 2. Assigns my\_choice the value “Pasta” 3. Assigns my\_choice a random item from the answers list 4. Will cause an error |

**Additional questions are provided below for the supplemental lessons: Design Process, Flowcharts and Lists**

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| **Unit 2 Vocabulary (Kahoot Review and Unit 2 Exam)** | |
| Select the best computer science definition for each vocabulary word | |
| Loop | 1. A series of instructions that runs one line at a time 2. Decision points in code 3. **Repeats a block of code, subject to a condition** 4. An expression that evaluates to True or False |
| Condition | 1. A series of instructions that runs one line at a time 2. Decision points in code 3. Repeats a block of code, subject to a condition 4. **An expression that evaluates to True or False** |
| While Loop | 1. A loop that never ends because the condition is always True 2. **Repeats a block of indented code as long as the condition is true** 3. Executes a block of code, subject to a condition 4. An expression that evaluates to True or False |
| Infinite Loop | 1. **A loop that never ends because the condition is always True** 2. Repeats a block of indented code as long as the condition is true 3. Executes a block of code, subject to a condition 4. An expression that evaluates to True or False |
| Float | 1. An integer number 2. **A decimal number** 3. Some text 4. Something that is True or False |
| Increment | 1. Assigning a value to a variable 2. Causing an error in code 3. **Increasing the value of a variable by a set amount** 4. Decreasing the value of a variable by a set amount |
| Decrement | 1. Assigning a value to a variable 2. Causing an error in code 3. Increasing the value of a variable by a set amount 4. **Decreasing the value of a variable by a set amount** |
| List | 1. A number that keeps track of what item should be displayed 2. An individual element or value 3. **A sequence of elements you can access with an index** 4. A built-in function that gets a random number |
| Index | 1. **A number that keeps track of what item should be displayed** 2. An individual element or value 3. A sequence of elements you can access with an index 4. A built-in function that gets a random number |
| Item | 1. A number that keeps track of what item should be displayed 2. **An individual element or value** 3. A sequence of elements you can access with an index 4. A built-in function that gets a random number |

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| **Unit 2 Concepts and Coding (Kahoot Review)** | |
| What is the data type of this value: ‘coding’ | 1. Integer 2. String 3. Float 4. Tuple |
| What is the data type of this value: 7 | 1. Integer 2. String 3. Float 4. Boolean |
| What is the data type of this value: 1.2 | 1. Integer 2. String 3. Float 4. Boolean |
| a.What is the data type of this value: False | 1. Tuple 2. String 3. Float 4. Boolean |
| What is the data type of this value: GREEN | 1. Tuple 2. String 3. Float 4. Boolean |
| What code will decrement ‘number’ by 1? | 1. number = value + 1 2. number = number - 1 3. number = number + 1 4. value = number - 1 |
| What is the correct code for using a break statement? | 1. **B.**   C.  D. |
| What does this code do? | 1. Compares choice to 0, branching when choice is less than 0 2. Gives an error message 3. Compares choice to 0, branching when choice is equal to 0 4. Assigns the variable choice the value 0 |
| What does this code do? | 1. Compares choice to 0, branching when choice is less than 0 2. Gives an error message 3. Compares choice to 0, branching when choice is equal to 0 4. Assigns the variable choice the value 0 |
| What is the result if BTN\_R is pressed? | 1. ‘choice’ is assigned the value 0 2. ‘choice’ is assigned the value 4 3. ‘choice’ is assigned the value 3 4. An error occurs |
| What code will give the number of items in a list? | 1. str(my\_list) 2. items(my\_list) 3. get\_items(my\_list) 4. len(my\_list) |
| What is the first index of every list? | 1. 0 2. 1 3. A 4. len(my\_list) - 1 |
| What is the last index of every list? | 1. len(my\_list) 2. Depends on the number of items 3. Z 4. len(my\_list) - 1 |
| Given this list, what are the values of the index? | 1. 1, 2, 3, 4, 5 2. 5, 9, 1, 4, 6 3. 0, 1, 2, 3, 4 4. len(my\_list) |
| Given this list, what is the value of my\_list[0]? | 1. 5 2. 9 3. 1 4. An error occurs |
| Given the code, what is the ‘count’ variable doing? | 1. Automatically scans the list and returns the number of items 2. Stores the number of items in the list to use in the randrange function 3. Selects an item from the list and displays it on the screen 4. Selects a random number between 0 and the number of items in the list |
| Given the code, what is the ‘index’ variable doing? | 1. Automatically scans the list and returns the number of items 2. Stores the number of items in the list to use in the randrange function 3. Selects an item from the list and displays it on the screen 4. Selects a random number between 0 and the number of items in the list |
| Given this command, what are the possible values of ‘index’? | 1. 1, 2, 3, 4 2. 0, 1, 2, 3 3. 0, 1, 2, 3, 4 4. An error will occur |
| What does this command do? | 1. Selects a random item from list “answers” 2. Selects a random item from “my\_choice” 3. Selects a random number between 0 and 6 4. Will cause an error |
| What is the result of this code? | 1. Assigns my\_choice the value 6 2. Assigns my\_choice the value “Pasta” 3. Assigns my\_choice a random item from the answers list 4. Will cause an error |

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| **Unit 2 Concepts and Coding (Unit 2 Exam)** | |
| What is the best data type for this value: True | 1. Integer 2. Float 3. String 4. **Boolean** 5. tuple |
| What is the best data type for this value: 3.15 | 1. Integer 2. **Float** 3. String 4. Boolean 5. tuple |
| What is the best data type for this value: 10 | 1. **Integer** 2. Float 3. String 4. Boolean 5. tuple |
| What is the best data type for this value: YELLOW | 1. Integer 2. Float 3. String 4. Boolean 5. **tuple** |
| What is the best data type for this value: “debug” | 1. Integer 2. Float 3. **String** 4. Boolean 5. tuple |
| What code will increment the variable count by 1? | 1. number = value + 1 2. **number = number + 1** 3. value =number + 1 4. number = number - 1 |
| What is the correct code for using a break command? | 1. c) 2. **d)** |
| What does this code do? | 1. Compares choice to 0, branching when choice is more than 0 2. Gives an error message 3. **Compares choice to 0, branching when choice is equal to 0** 4. Assigns the variable “choice” the value 0 |
| What does this code do? | 1. Compares choice to 0, branching when choice is more than 0 2. **Gives an error message** 3. Compares choice to 0, branching when choice is equal to 0 4. Assigns the variable “choice” the value 0 |
| What is the result if BTN\_B is pressed? | 1. index = 1 2. index = 0 3. **index = 5** 4. An error occurs |
| What code will give the number of items in a list? | 1. str(my\_list) 2. int(my\_list) 3. **len(my\_list)** 4. get\_items(my\_list) |
| What value is always the FIRST index of every list? | 1. 1 2. **0** 3. A 4. len(my\_list) - 1 |
| What value is always the LAST index of every list? | 1. 1 2. 0 3. A 4. **len(my\_list) - 1** |
| Given this list, what are the possible values of the index? | 1. **0, 1, 2, 3, 4** 2. 1, 2, 3, 4, 5 3. A, B, C, D, F 4. len(my\_list) - 1 |
| Given the list, what is the item at my\_list[2] ? | 1. “A” 2. “B” 3. **“C”** 4. “D” |
| Given this code, what is the “count” variable doing? | 1. **Stores the number of items in the list to use in the randrange function** 2. Selects an item from the list and displays it on the screen 3. Automatically scans the list and returns the number of items 4. Selects a random number between 0 and the number of items in the list |
| Given this code, what is the “index” variable doing? | 1. Stores the number of items in the list to use in the randrange function 2. Selects an item from the list and displays it on the screen 3. Automatically scans the list and returns the number of items 4. **Selects a random number between 0 and the number of items in the list** |
| Given this code, what are the possible values of “number”? | 1. 1, 2, 3, 4, 5 2. 0, 1, 2, 3, 4, 5 3. **0, 1, 2, 3, 4** 4. An error will occur |
| What does this command do? | 1. Assigns “answer” a random item from “my\_choice” 2. **Assigns “my\_choice” a random item from “answers”** 3. Assigns “my\_choice” a random number between 0 and “answers” 4. Will cause an error |
| What is the result of this code: | 1. Assigns “my\_choice” the value 6 2. Assigns “my\_choice” the value “Pasta” 3. Assigns “my\_choice” a random item from the list “answers” 4. **Will cause an error** |

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| **Questions for Supplemental Lessons – Design Process, Flowcharts, and Lists** | |
| **Vocabulary:** Select the best computer science definition for each vocabulary word | |
| Design process | 1. A tool that helps you break down large projects into smaller stages 2. A diagram that uses shapes to sequence steps 3. A sequence of steps for completing a task 4. A code segment that accomplishes a specific task |
| Algorithm | 1. A tool that helps you break down large projects into smaller stages 2. A diagram that uses shapes to sequence steps 3. A sequence of steps for completing a task 4. A code segment that accomplishes a specific task |
| Flowchart | 1. A tool that helps you break down large projects into smaller stages 2. A diagram that uses shapes to sequence steps 3. A sequence of steps for completing a task 4. A code segment that accomplishes a specific task |
| **Coding and Concepts Questions** | |
| What is the third step in the design process? | 1. Research solutions 2. Plan a solution 3. Code the solution 4. Document and reflect |
| What is the fourth step in the design process? | 1. Research solutions 2. Plan a solution 3. Code the solution 4. Document and reflect |
| What is the fifth step in the design process? | 1. Research solutions 2. Plan a solution 3. Code the solution 4. Document and reflect |
| What flowchart shape is used for making decisions? | 1. B.   C.   **D.** |
| What flowchart shape is used for beginning and ending the program? | 1. B.   C.  D. |
| What flowchart shape is used for an action or process? | 1. B.   **C.**  D. |
| What flowchart shape is used for input and output? | 1. **B.**   C.  D. |
| What code defines an empty list? | 1. a\_list = [] 2. a\_list = () 3. a\_list = {} 4. a\_list.new() |
| Given the list, what is the value of my\_list[6]? | 1. 2 2. 8 3. 3 4. Index out of range error |
| Given this code, what is the new value of my\_list[3]? | 1. 3 2. 2 3. 8 4. 6 |
| Which Python method adds an element at the end of the list? | 1. pop() 2. add() 3. append() 4. insert() |
| Which Python method adds an element at a given index? | 1. pop() 2. add() 3. append() 4. insert() |
| Which Python method removes the element at a given index? | 1. pop() 2. remove() 3. append() 4. insert() |
| What is the length of the list after the code segment is executed? | 1. 3 2. 6 3. 7 4. 5 |
| What is my\_list[3] after the code segment is executed? | 1. 2 2. 4 3. 6 4. 8 |
| What is the value of my\_list after the code segment is executed? | 1. my\_list = [5] 2. my\_list = [1, 1, 1, 1, 1] 3. my\_list = [0, 1, 2, 3, 4] 4. my\_list = [0, 0, 0, 0] |