| **Learning Objectives** | * How to use Strings, and logical operators. * How to use arrays to implement algorithms * Using loops for repetition. * Using functions. |
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| **Time** | **Activity** |
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| (3 min) | **OPENING** |
| (1 hours 15 min) | **CONTENT** |
| (10 min) | **DEBRIEF** |
| (2 min) | **CLOSING** |

| **OPENING (3 min)** |
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| **Activity Type** | Reading |
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| **Framing Text** | Welcome to this session about Programming fundaments  In this section you will be able to work on programming question that will help you to understand some necessary tools and building blocks required to solve problem in JavaScript.  You have to complete all the questions  By the end of this session, you will be able to:   * How manipulate Strings and use its methods. * How to use arrays and use loops to implement algorithms. * Using functions to implement you solution to the problem. |
| **Assets** | * n/a |

| **CONTENT (1 hours 10 min)** |
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| **Activity Type** | Coding |
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| **Framing Text** | This will take you approximately **1 hours 15 mins** to complete.  After completing it, you will return to code files by zipping in the folders for a debrief.  **Complete:**  Happy coding!   | **Note**: Please reach out to instructors asking for help if you get stuck with understanding of questions | | --- | |
| **Assets** | * Write a program to find reverse a given string using JavaScript? * Write a program to Find the sum of all elements/numbers of a given array? [1,3,4,6,7] * Write a program that to find the most frequent item of an array? [3, 'a', 'a', 'a', 2, 3, 'a', 3, 'a', 2, 4, 9, 3]; * Write a program that will take value from <input> in HTML page and when you press a ADD button it will add that to an array. You have to put a condition that if the number is integer than only it is added. If it is a character then do not add it. Also when you press the DISPLAY button all the values should be displayed in div. * Write a JavaScript function that returns the longest palindrome in a given string. * Write a function in JavaScript that take array as an input. It check if the element of the number is integer then it calls another function that will add this number with previous one and return the sum and store it in an integer array. If it is string than it calls a function that will concat() strings and with the previous one and strong in another array. When the array is exhausted it should return both integer and string array. |

| **DEBRIEF (15 min)** |
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| **Activity Type:** | Discussion Forum - Ask learners to check for comprehension of the tasks above. |
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