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| **EXPERIMENT 7** | | | | | | | |
| **Control Structure Testing** | | | | | | | |
| **Program to print day of the week** | | | | | | | |
| **Test Case ID** | **Description** | **Pre-Condition** | **Steps** | **Input Data** | **Expected Result** | **Actual Result** | **Status** |
| TC1 | Verify the day name for the current date. | Respective Compiler should be present | 1. Execute the provided program. | N/A | Expected: "Today is Friday" | Actual: “Friday” | PASS |
| TC2 | Check the day name for a specific date. | Respective Compiler should be present | 1. Modify **current Date** to a specific date. | Specific Date | Expected: “Monday” | Actual: “Monday” | PASS |
| TC3 | Verify the day name for an invalid date. | Respective Compiler should be present | 1. Execute the modified program with an invalid date ("Invalid Date"). | "Invalid Date" | Expected: "Today is undefined" | Actual: "Today is undefined" | PASS |
| **Program to sort an array using bubble sort** | | | | | | | |
| **Test Case ID** | **Description** | **Pre-Condition** | **Steps** | **Input Data** | **Expected Result** | **Actual Result** | **Status** |
| TC4 | Sorting an array in ascending order | Array 'a' is initialized with values | Run the provided sorting algorithm on array 'a' | [5, 7, 1, 3, 9] | Array ‘a’ should be sorted[1, 3, 5, 7, 9] | Array ‘a’ is sorted [1, 3, 5, 7, 9] | PASS |
| TC5 | Sorting an array with one element | Array 'a' contains a single element | Run the provided sorting algorithm on array 'a' | [55] | Expected Sorted Array [55] | Actual Sorted Array [55] | PASS |
| TC6 | Sorting an already sorted array | Array 'a' is already sorted | Run the provided sorting algorithm on array 'a' | [1, 2, 3, 4, 5] | Expected Sorted Array [1,2,3,4,5] | Actual Sorted Array [1,2,3,4,5] | PASS |
| TC7 | Sorting an empty array | Array 'a' is already sorted | Run the provided sorting algorithm on array 'a' | [] | Expected Sorted Array [] | Actual Sorted Array [] | PASS |