`Worksheet 6:

1. A)

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| --- | --- | --- |
| Category | Test Data | Expected Result |
| n < 50 | 45 | “F” |
| 50 <= n <= 59 | 55 | “5” |
| 60 <= n <= 69 | 65 | “6” |
| 70 <= n <= 79 | 75 | “7” |
| 80 <= n <= 89 | 85 | “8” |
| 90 <= n <= 99 | 95 | “9” |
| n = 100 | 100 | “10” |
| Invalid n | -50 | “” |

B)

|  |  |  |
| --- | --- | --- |
| Category | Test Data | Expected Result |
| W >= 2, L >= 2.5, H >= 3 | W = 2, L = 3, H = 5 | 30 |
| W < 2, L >= 2.5, H >= 3 | W = 1, L = 3, H = 5 | 0 |
| W < 2, L < 2.5, H >= 3 | W = 2, L = 1, H = 5 | 0 |
| W >= 2, L < 2.5, H >= 3 | W = 2, L = 3, H = 2 | 0 |
| W >= 2, L < 2.5, H < 3 | W = 2, L = 2.4, H.= 2.9 | 0 |
| W < 2, L >= 2.5, H < 3 | W = 1.9, L = 2.5, H = 2.9 | 0 |
| W >= 2, L >= 2.5, H < 3 | W = 2, L = 2, H = 2.9 | 0 |
| W < 2, L < 2.5, H < 3 | W = 1.9, L = 2.4, H = 2.9 | 0 |

C)

|  |  |  |
| --- | --- | --- |
| Category | Test Data | Expected Result |
| checkUpper = true AND ch = uppercase | checkUpper = true, A | true |
| checkUpper = true AND ch = lowercase | checkUpper = true, a | false |
| checkUpper = false AND ch = uppercase | checkUpper = false, B | false |
| checkUpper = false AND ch = lowercase | checkUpper = false, b | true |
| checkUpper = true AND ch = special | checkUpper = true, - | false |
| checkUpper = false AND ch = special | checkUpper = false, / | false |

D)

|  |  |  |
| --- | --- | --- |
| Category | Test Data | Expected Result |
| Str1 == str2 | “abc” + “abc” | “abc” |
| Str1 contains str2 | “abc” + “ab” | “ab” |
| Str2 contains str1 | “abc” + “abcd” | “abc” |
| Str1 !contains str2 | “hello” + “goodbye” | “” |

1. A)

|  |  |  |
| --- | --- | --- |
| Category | Test Data | Expected Result |
| -1 / 0 | -5, 1 | “”, “F” |
| 49 / 50 | 49, 50 | “F”, “5” |
| 59 / 60 | 59, 60 | “5”, “6” |
| 69 / 70 | 69, 70 | “6”, “7” |
| 79 / 80 | 79, 80 | “7”, “8” |
| 89 / 90 | 89, 90 | “8” “9” |
| 99 / 100 | 99, 100 | “9”, “10” |

B)

|  |  |  |
| --- | --- | --- |
| Category | Test Data | Expected Result |
| Invalid / 0 | -1, 0 | “-“, “low” |
| Low / Moderate | 2, 3 | “low”, “moderate” |
| Moderate / High | 5, 6 | “moderate”, “high” |
| High / Very High | 7, 8 | “high”, “very high” |
| Very High / Extreme | 10, 11 | “very high”, “extreme” |