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Course: 1633-001

Instructor: Paul Pospisil

Assignment: Assignment 1

Due Date: Monday, January 31, 2022 at 11:59pm

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Test Case #** | **Reason for Test** | **Number of Carries** | **Carry** | **Stand alone or ripple carry** | **Test Data** | | | **Expected Result** | **Actual Result** | **Pass/Fail** |
| **Age** | **First numbers** | **Second numbers** |
| 1 | Both num1 and num2 are all negative | 1 | Only -1 | Stand alone | 3 | -3,-1,-2,-1,-1,-1 | -2,-1,-1,-1,-2,-2 | 2,-3,-3,-2,-3,-3 | 2,-3,-3,-2,-3,-3 | Pass |
| 2 | Both num1 and num2 are negatives and zeroes | 1 | -1 | Stand alone | 3 | -3,-1,-2,-1,-1,0 | -2,-1,-1,0,-2,-2 | 2,-3,-3,-1,-3,-2 | 2,-3,-3,-1,-3,-2 | Pass |
| 3 | Both num1 and num2 are a mix of positive and negative | 1 | Only -1 | Stand alone | 3 | 1,-2,-2,2,3,-2 | 2,-3,3,-1,-3,2 | 3,2,0,1,0,30 | 3,2,0,1,0,30 | Pass |
| 4 | Both num1 and num2 are a mix of positive and negative and zeroes | 1 | Only -1 | Stand alone | 3 | 1,-2,-2,2,3,0 | 2,-3,3,-1,0,2 | 3,2,0,1,3,2 | 3,2,0,1,3,2 | Pass |
| 5 | Both num1 and num2 are all positive | 1 | Only 1 | Stand alone | 3 | 1,2,3,1,1,1 | 1,1,2,1,2,2 | 2,3,-2,3,3,3 | 2,3,-2,3,3,3 | Pass |
| 6 | Both num1 and num2 are positives and zeroes | 1 | Only 1 | Stand alone | 3 | 1,2,3,1,0,1 | 1,1,2,0,3,2 | 2,3,-2,2,3,3 | 2,3,-2,2,3,3 | Pass |
| 7 | Both num1 and num2 are a mix of positive, negative and zeroes | 1 | Only 1 | Stand alone | 3 | -2,1,-3,-3,-2,0 | 3,3,3,2,3,1 | 1,-3,1,-1,1,1 | 1,-3,1,-1,1,1 | Pass |
| 8 | Both num1 and num2 are all negative | 2 || > 2 | Only -1 | Stand alone | 3 | -3,-1,-3,-1,-1,-1 | -1,-1,-1,-1,-1,-1 | 3,-3,3,-3,-2,-2 | 3,-3,3,-3,-2,-2 | Pass |
| 9 | Both num1 and num2 are negatives  And zeros | 2 || > 2 | only -1 | Stand alone | 3 | -3,-1,-3,-1,-1,0 | -1,-1,-1,-1,0,-1 | 3,-3,3,-3,-1,-1 | 3,-3,3,-3,-1,-1 | Pass |
| 10 | Both num1 and num2 are a mix of positive and negative | 2 || > 2 | Only -1 | Stand alone | 3 | -3,-1,-3,-1,-1,-1 | -1,-1,-1,-1,-1,-1 | 3,-3,3,-3,-2,-2 | 3,-3,3,-3,-2,-2 | Pass |
| 11 | Both num1 and num2 are a mix of positive negative, zeroes | 2 || > 2 | Only -1 | Stand alone | 3 | -3,2,-3,2,1,-1 | -1,1,-1,1,-1,0 | 3,2,3,2,0,-1 | 3,2,3,2,0,-1 | Pass |
| 12 | Both num1 and num2 are a mix of positive and negative | 2 || > 2 | -1 & 1 | Stand alone | 3 | 3,-1,1,-1,-2,1 | 3,1,3,1,1,-1 | -1,1,-3,1,-1,0 | -1,1,-3,1,-1,0 | Pass |
| 13 | Both num1 and num2 are a mix of positive, negative  And zeroes | 2 || > 2 | -1&1 | Stand alone | 3 | 3,0,1,1,0,1 | 3,2,3,1,0,0 | -1,3,-3,3,0,1 | -1,3,-3,3,0,1 | Pass |
| 14 | Both num1 and num2 are all positive | 2 || > 2 | Only 1 | Stand alone | 3 | 3,1,3,1,2,1 | 3,1,3,1,2,1 | -1,3,-1,3,3,2 | -1,3,-1,3,3,2 | Pass |
| 15 | Both num1 and num2 are all positive  And zeroes | 2 || > 2 | Only 1 | Stand alone | 3 | 3,1,3,0,2,-1 | 3,1,3,1,0,1 | -1,3,-1,2,2,0 | -1,3,-1,2,2,0 | Pass |
| 16 | Both num1 and num2 are a mix of positive and negative | 2 || > 2 | Only 1 | Stand alone | 3 | 3,-1,3,-1,-1,-2 | 3,2,3,2,-2,-1 | -1,2,-1,2,-3,-3 | -1,2,-1,2,-3,-3 | Pass |
| 17 | Both num1 and num2 are a mix of positive, negative  And zeroes | 2 || > 2 | Only 1 | Stand alone | 3 | 3,-1,3,-1,-1,0 | 3,2,3,2,0,-1 | -1,2,-1,2,-1,-1 | -1,2,-1,2,-1,-1 | Pass |
| 18 | Both num1 and num2 are all negative | 2 || > 2 | -1 | ripple | 3 | -3,-3,-2,-1,-1,-1 | -2,-3,-3,-1,-2,-2 | 2,0,1,-3,-3,-3,3 | 2,0,1,-3,-3,-3,3 | Pass |
| 19 | Both num1 and num2 are negatives  And zeroes | 2 || > 2 | -1 | ripple | 3 | -3,-3,-2,-1,0,-1 | -2,-3,-3,-1,-2,0 | 3,0,1,-3,-2,-1 | 3,0,1,-3,-2,-1 | Pass |
| 20 | Both num1 and num2 are a mix of positive and negative | 2 || > 2 | -1 | ripple | 3 | -3,-3,-2,-1,2,2 | -2,-3,-3,-1,1,1 | 2,0,1,-3,3,3 | 2,0,1,-3,3,3 | Pass |
| 21 | Both num1 and num2 are a mix of positive, negative and zeroes | 2 || > 2 | -1 | ripple | 3 | -3,-3,-2,-1,0,2 | -2,-3,-3,-1,1,0 | 2,0,1,-3,1,2 | 2,0,1,-3,1,2 | Pass |
| 22 | Both num1 and num2 are a mix of positive and negative | 2 || > 2 | -1 & 1 | ripple | 3 | -3,3,1,-1,3,1 | -2,3,1,-1,-1,1 | 2,-2,3,-2,2,2 | 2,-2,3,-2,2,2 | Pass |
| 23 | Both num1 and num2 are a mix of positive, negative and zeroes | 2 || > 2 | -1 & 1 | ripple | 3 | -3,3,1,-1,3,1 | -2,3,1,-1,0,0 | 2,-2,3,-2,3,1 | 2,-2,3,-2,3,1 | Pass |
| 24 | Both num1 and num2 are all positive | 2 || > 2 | 1 | ripple | 3 | 3,3,1,2,1,2 | 2,3,3,2,1,1 | -2,0,-2,-2,3,3 | -2,0,-2,-2,3,3 | Pass |
| 25 | Both num1 and num2 are a mix of positive and negative | 2 || > 2 | 1 | ripple | 3 | 3,3,1,0,0,-2 | 2,3,3,2,-1,0 | -2,0,-2,3,-1,-2 | -2,0,-2,3,-1,-2 | Pass |
| 26 | Both num1 and num2 are all positive and zeroes | 2 || > 2 | 1 | ripple | 3 | 3,3,1,0,0,2 | 2,3,3,2,1,0 | -2,0,-2,3,1,2 | -2,0,-2,3,1,2 | Pass |
| 27 | Both num1 and num2 are a mix of positive, negative and zeroes | 2 || > 2 | 1 | ripple | 3 | 3,3,1,1,0,0 | 2,3,2,1,3,-2 | -2,0,-3,3,3,-2 | -2,0,-3,3,3,-2 | Pass |
| 28 | Both num1 and num2 are all zeroes | 0 | 0 | Non | 3 | 0,0,0,0,0,0 | 0,0,0,0,0,0 | 0,0,0,0,0,0 | 0,0,0,0,0,0 | Pass |
| 29 | Both num1 and num2 are a mix of positive and negative | 0 | 0 | Non | 3 | 3,-1,2,3,-3,1 | -2,3,1,-3,2,1 | 1,2,3,0,-1,2 | 1,2,3,0,-1,2 | Pass |
| 30 | Both num1 and num2 are all positive | 0 | 0 | Non | 3 | 1,1,1,1,1,1 | 1,1,1,1,1,1 | 2,2,2,2,2,2 | 2,2,2,2,2,2 | Pass |
| 31 | Both num1 and num2 are all negative | 0 | 0 | Non | 3 | -1,-2,-1,-1,-1,-1 | -1,-1,-1,-2,-2,-1 | -2,-3,-2,-3,-3,-2 | -2,-3,-2,-3,-3,-2 | Pass |
| 32 | Both num1 and num2 are a mix of positive and negative and zeroes | 0 | 0 | Non | 3 | -1,-2,0,-1,-1,-1 | -1,-1,-1,-2,-2,0 | -2,-3,-1,-3,-3,-1 | -2,-3,-1,-3,-3,-1 | Pass |