|  |  |  |  |
| --- | --- | --- | --- |
| Case | Reason | Expected output | Actual output |
| 5 11 \* 5- = | No space between number and operator | 50 | 5 11 \* 5- =50 |
| 5 6 7 10+ +-= | Operators at the very end | -18 | 5 6 7 10+ +-=-18 |
| 3 2 4 ^ \* 5 3 2 ^ \* 4 2^ 3 5 \* -+ + =94 | Group Split between operators and numbers | 94 | 3 2 4 ^ \* 5 3 2 ^ \* 4 2^ 3 5 \* -+ + =94 |
| 123 456 321 \*\* =18004248 | Spacing in the front | 18004248 | 123 456 321 \*\* =18004248 |
| 2 16 ^ = | Exponent check | 65536 | 2 16 ^ =65536 |
| 2 20 ^ 5 5 - / = | Divide by 0 | **You are trying to divide by zero!** | Math error, cannot divide by 0 |
| 2 20 ^^ = | Erroneous syntax | **Invalid Syntax . An operator must have at least 2 numbers before it.** | INVALID expression, Not enough numbers |
| 2 2 2 2 2 2 3 3 3 += | Erroneous syntax | **--** | INVALID expression, Too many numbers |

Reference for RPN calculator - http://www.meta-calculator.com/learning-lab/reverse-polish-notation-calculator.php