## Test Plan

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| ID | Description | | | Pre-Condition | | Expected Input | Expected Output | | Actual Output | |
| HL1\_L1\_1 | Addition of values | | | Choose addition from all options | | Two int operands | Sum of the two operands | |  | |
| HL1\_L1\_2 | Addition of values | | | Choose addition from all options | | Any one int operand >= to  65535 | Error as int return value can  only give 65535 | |  | |
| HL1\_L2\_1 | Subtraction of values | | | Choose subtract  from all options | | Two int operands | difference of the  two operands | |  | |
| HL1\_L2\_2 | Subtraction of values | | | Choose subtract from all options | | Anu one int operand >= to  65535 | Error as int return value can  only give 65535 | |  | |
| HL1\_L3\_1 | Multiplication of values | | | Choose multiply from all the  options | | Two int  operands | Product of two operands | |  | |
| HL1\_L4\_1 | Division of values | | | Choose divide from all the  options | | Two non-zero int operands | division of two operands | |  | |
| HL1\_L4\_2 | Division of values | | | Choose divide from all the  options | | Two int  operands with divisor 0 | Divide by 0 error | |  | |
| HL2\_L1\_1 | Nth Power | | | Choose Power from all the  options | | Two non-zero int operands | Operand1 raised to power of  operand2 | |  | |
| HL2\_L1\_2 | Nth Power | | | Choose Power from all the  options | | Two int operands with  operand2 =0 | Return 1 | |  | |
| HL2\_L2\_1 | Square | | | Choose Square from all the  options | | One int operand | Returns operand raised to power  2 | |  | |
| HL2\_L3\_1 | Factorial | | | Choose factorial from all the  options | | One int operand non-zero and  non-negative | Returns factorial of operand | |  | |
| HL2\_L3\_2 | Factorial | | | Choose factorial from all the  options | | One int operand equal to 0 | Returns 1 | |  | |
| HL2\_L3\_3 | Factorial | | | Choose factorial from all the  options | | One int operand negative | Error and return -1 | |  | |
| HL2\_L4\_1 | Greater | | | Choose Greater from all the  options | | Two int  operands | Greater of  operand1 and operand 2 | |  | |
| HL2\_L5\_1 | Smaller | | | Choose Smaller  from all the options | | Two int  operands | Smaller of  operand1 and operand 2 | |  | |
| HL2\_L6\_1 | Prime | | | Choose prime  from all the options | | One int operand  non-zero and non-negative | Returns if prime or not | |  | |
| HL2\_L6\_2 | | Prime | Choose prime from all the  options | | One int operand equal to 0 or 1 | | Error and returns  -1 |  | |
| HL2\_L6\_3 | | Prime | Choose prime from all the  options | | One int operand negative | | Error and return  -1 |  | |
| HL2\_L7\_1 | | Modulus | Choose modulus from all the  options | | Two int  operands | | Returns the remainder |  | |
| HL2\_L8\_1 | | Square root | Choose modulus from all the  options | | One int operand | | Returns float value of square  root of operand1 |  | |
| HL3\_L1\_1 | | Sin Value | Choose sin value from all the  options | | One float operand | | Returns sine of operand1 in float |  | |
| HL3\_L2\_1 | | Cos Value | Choose cos value from all the options | | One float operand | | Returns cosine of operand1 in float |  | |
| HL3\_L3\_1 | | Tan Value | Choose tan value from all the  options | | One float operand not 90  degrees | | Returns sine of operand1  tangent in float |  | |
| HL3\_L3\_2 | | Tan Value | Choose tan value from all the  options | | One float operand equal  90 degrees | | Error as value not defined  returns -1 |  | |
| HL4\_L1\_1 | | Centimeter to meter | Choose CMTOM from all the options | | One float operand | | Returns value in meters in float |  | |
| HL4\_L2\_1 | | Meter to centimeter | Choose MTOCM from all the options | | One float operand | | Returns value in centimeters in  float |  | |
| HL4\_L3\_1 | | Meter to kilometer | Choose MTOKM from all the options | | One float operand | | Returns value in kilometers in  float |  | |
| HL4\_L4\_1 | | Kilometer to meter | Choose KMTOM from all the options | | One float operand | | Returns value in meters in float |  | |
| HL4\_L5\_1 | | Inch to centimeter | Choose  INCHTOM from all the options | | One float operand | | Returns value in  centimeters in float |  | |
| HL4\_L6\_1 | | Centimeter to inch | Choose MTOINCH from  all the options | | One float operand | | Returns value in inches in float |  | |
| HL5\_L1\_1 | | Logical AND | Choose AND operation from all the options | | Two int operands | | Returns AND of two values in int |  | |
| HL5\_L1\_2 | | Logical AND | Choose AND operation from all the options | | In two int any one operand is invalid | | Returns error as another operand is invalid |  | |
| HL5\_L2\_1 | | Logical OR | Choose OR operation from all the options | | Two int operands | | Returns OR of two values in int |  | |
| HL5\_L2\_2 | | Logical OR | Choose OR operation from all the options | | In two int any one operand is invalid | | Returns error as another operand is invalid |  | |
| HL5\_L3\_1 | | Logical NOT | Choose NOT operation from all the options | | int operand | | Returns NOT of int operand |  | |
| HL5\_L3\_2 | | Logical NOT | Choose NOT operation from all the options | | Invalis int operands | | Returns error as operand is invalid |  | |
| HL5\_L4\_1 | | Logical NAND | Choose NAND operation from all the options | | Two int operands | | Returns NAND of two values in int |  | |
| HL5\_L4\_2 | | Logical NAND | Choose NAND operation from all the options | | In two int any one operand is invalid | | Returns error as another operand is invalid |  | |
| HL5\_L5\_1 | | Logical NOR | Choose NOR operation from all the options | | Two int operands | | Returns NOR of two values in int |  | |
| HL5\_L5\_2 | | Logical NOR | Choose NOR operation from all the options | | In two int any one operand is invalid | | Returns error as another operand is invalid |  | |
| HL5\_L6\_1 | | Logical XOR | Choose XOR operation from all the options | | Two int operands | | Returns XOR of two values in int |  | |
| HL5\_L6\_2 | | Logical XOR | Choose XOR operation from all the options | | In two int any one operand is invalid | | Returns error as another operand is invalid |  | |
| HL5\_L7\_1 | | Logical XNOR | Choose XNOR operation from all the options | | Two int operands | | Returns XNOR of two values in int |  | |
| HL5\_L7\_2 | | Logical XNOR | Choose XNOR operation from all the options | | In two int any one operand is invalid | | Returns error as another operand is invalid |  | |