**LOGICAL BUILDING 1**

**Learn the use of division / and mod % operations to solve problems**

|  |  |
| --- | --- |
| IS EVEN? | <https://tests.mettl.com/authenticateKey/2bd025dc> |
| IS ODD? | <https://tests.mettl.com/authenticateKey/dbdac2a9> |
| Return last digit of the given number | <https://tests.mettl.com/authenticateKey/454f012b> |
| Return second last digit of given number | <https://tests.mettl.com/authenticateKey/9f87004e> |
| Sum of last digit of two given numbers | <https://tests.mettl.com/authenticateKey/783a1fcf> |

**Learn the use of division / and mod % operations to solve problems**

|  |  |
| --- | --- |
| **Is N an exact multiple of M?** | <https://tests.mettl.com/authenticateKey/36c4ef58> |
| **Of given 5 numbers, how many are even?** | <https://tests.mettl.com/authenticateKey/8edbe922> |
| **Of given 5 numbers, how many are odd?** | <https://tests.mettl.com/authenticateKey/67147bd5> |
| **Of given 5 numbers, how many are even or odd?** | <https://tests.mettl.com/authenticatekey/607636d7> |

**Learn to solve math based number problems (will require loops and maths)**

|  |  |
| --- | --- |
| Is Prime? | <https://tests.mettl.com/authenticateKey/b1efaa3d> |
| Factorial of a number | <https://tests.mettl.com/authenticateKey/8c1f2ae> |
| Nth Fibonacci | <https://tests.mettl.com/authenticateKey/f390cadf> |
| Nth Prime | <https://tests.mettl.com/authenticateKey/34fdaa41> |

**Learn to solve math based number problems (will require loops and maths)**

|  |  |
| --- | --- |
| Number of Primes in a specified range | <https://tests.mettl.com/authenticateKey/87c41143> |
| All Digits Count | <https://tests.mettl.com/authenticateKey/ed6b4da> |
| Unique Digits Count | <https://tests.mettl.com/authenticateKey/b7aac4a5> |
| Non-Repeated Digits’ Count | <https://tests.mettl.com/authenticateKey/e46500f5> |

**Learn to solve number based problems (will require loops)**

|  |  |
| --- | --- |
| **digitSum: sum of all digits in N** | <https://tests.mettl.com/authenticateKey/ab1d60cc> |
| **digitSum even: sum of even digits in N** | <https://tests.mettl.com/authenticateKey/b55d1714> |
| **digitSum odd: sum of odd digits in N** | <https://tests.mettl.com/authenticateKey/738fdee0> |
| **digitSum opt: sum of even or odd digits** | <https://tests.mettl.com/authenticateKey/a05abbcf> |

**Learn to solve number based problems**

|  |  |
| --- | --- |
| **Is Palindrome Number?** | <https://tests.mettl.com/authenticateKey/28c41d9d> |
| Is Palindrome Possible? | <https://tests.mettl.com/authenticateKey/f4fdb02> |
| **Create PIN using alpha, beta, gamma** | <https://tests.mettl.com/authenticateKey/be582d9f> |
| Weight of a hill pattern | <https://tests.mettl.com/authenticateKey/d612c0e6> |

**Learn to solve number based problems and string based problem**

|  |  |
| --- | --- |
| Return second word in Uppercase | <https://tests.mettl.com/authenticateKey/4a72723f> |
| Is Palindrome (string) | <https://tests.mettl.com/authenticateKey/ffe8042> |
| **Weight of string** | <https://tests.mettl.com/authenticateKey/387952fc> |
| Most Frequent Digit | <https://tests.mettl.com/authenticateKey/916310b8> |

**LOGICAL BUILDING 2**

**String Based Programs (part 1)**

|  |  |
| --- | --- |
| **FindStringCode** | <https://tests.mettl.com/authenticateKey/e4df74e5> |
| **Get Code Through Strings** | <https://tests.mettl.com/authenticateKey/75c9faf0> |
| **Addition using Strings** | <https://tests.mettl.com/authenticateKey/2f174a80> |

**Array Based Program**

|  |  |
| --- | --- |
| **Simple Encoded Array** | <https://tests.mettl.com/authenticateKey/1557c062> |
| **Decreasing sequence** | <https://tests.mettl.com/authenticateKey/8e68e9a4> |
| **Most Frequently Occurring Digit** | <https://tests.mettl.com/authenticateKey/cbe4c4da> |

**Number Based Program**

|  |  |
| --- | --- |
| **Sum of Power of Digits** | <https://tests.mettl.com/authenticateKey/92437794> |
| **Sum of Sums of Digits in Cyclic order** | <https://tests.mettl.com/authenticateKey/1ddbe65e> |

**String Based Programs (part 2)**

|  |  |
| --- | --- |
| **Identify possible words** | <https://tests.mettl.com/authenticateKey/13486c16> |
| **Encoding Three Strings** | <https://tests.mettl.com/authenticateKey/f05028d5> |

**LOGICAL BUILDING 3**

**Number Based Program**

|  |  |
| --- | --- |
| **Generate series and find Nth element** | <https://tests.mettl.com/authenticateKey/d2272e10> |
| **Find result after alternate add\_sub on N** | <https://tests.mettl.com/authenticateKey/814effc3> |
| Find Password (stable unstable) | <https://tests.mettl.com/authenticateKey/5106dfd> |
| Calculate sum of non-prime index values | <https://tests.mettl.com/authenticateKey/596e522f> |
| Find the one digit to be removed to form palindrome | <https://tests.mettl.com/authenticateKey/6d825776> |

**String Based Program**

|  |  |
| --- | --- |
| The “Nambiar Number” Generator | <https://tests.mettl.com/authenticateKey/7db6c8a4> |
| **User ID Generation** | <https://tests.mettl.com/authenticateKey/592740f3> |
| Message controlled Robot movement | <https://tests.mettl.com/authenticateKey/aedcc3a6> |