1. Series Summation, Subtraction, Multiplication

|  |  |
| --- | --- |
| 4  1 2 3 4 | 10 |

|  |  |
| --- | --- |
| 5  10 20 30 50 80 | -170 |

|  |  |
| --- | --- |
| 3  -3 6 7 | -126 |

1. Consider this series:

A – B + C – D + E – F + …………………….

For **n** sets of input what will be the output?

|  |  |
| --- | --- |
| 6  10 200 300 30 50 40 | 90 |

1. Find out **n!**

|  |  |
| --- | --- |
| 7 | 5040 |

1. Find out n’th power

|  |  |
| --- | --- |
| 5 3 | 125 |

1. Summation of n^2 & n^3 series

|  |  |
| --- | --- |
| 10 | 385 3025 |

1. Check Prime or Composite

|  |  |
| --- | --- |
| 17 | Prime |
| 15 | Composite |

1. How many leap year between two numbers**?**

|  |  |
| --- | --- |
| 2000 3000 | 243 |

1. Show Perfect Square between two numbers

|  |  |
| --- | --- |
| 1 10 | 1 4 9 |

1. Multiplication Table generation

|  |  |
| --- | --- |
| 6 | 6 X 1 = 6  6 X 2 = 12  6 X 3 = 18  6 X 4 = 24  6 X 5 = 30  6 X 6 = 36  6 X 7 = 42  6 X 8 = 48  6 X 9 = 54  6 X 10 = 60 |

1. Show Fibonacci number up to n’th term

|  |  |
| --- | --- |
| 8 | 0 1 1 2 3 5 8 13 |

1. Output in reverse order

|  |  |
| --- | --- |
| 3456 | 6543 |

1. Sum of all digit

|  |  |
| --- | --- |
| 4569 | 24 |

1. Consider this algorithm

Input **n**

Print **n**

If n=1 then stop

If n is odd then n = 3n + 1

Else n = n/2

Go to 2nd line

|  |  |
| --- | --- |
| 10 | 5 16 8 4 2 1 |

1. Check Armstrong number (Whose digit cube summation is the number itself)

|  |  |
| --- | --- |
| 153 | Yes |
| 371 | Yes |

1. GCD, LCM calculation

|  |  |
| --- | --- |
| 8 12 | GCD = 4 LCM = 24 |