**Problems in loop**

1. Accept ‘n’, print from 1 to n
2. Accept ‘n’, print from n to 1
3. Accept ‘m’ and ‘n’, print from ‘m’ to ‘n’, forward and reverse.
4. Accept ‘n’,
   1. print all even numbers from 1 to ‘n’
   2. print all odd numbers from 1 to ‘n’
5. Accept ‘n’, print sum of all numbers from 1 to ‘n’
6. Accept ‘n’, print product of all numbers from 1 to ‘n’/ factorial of n
7. Accept ‘n’
   1. print Fibonacci of all numbers from 1 to ‘n’
   2. print ‘n’ Fibonacci numbers
8. Accept base ‘x’ and exponent ‘n’, print xn
9. Accept two numbers, print GCD/HCF and LCM.
10. Accept a number ‘n’
    1. check it is prime number or not
    2. generate all prime number within the range 1-n
    3. print all factors of n
    4. print all prime factors of n
11. Keep on accepting number till user wises, print the maximum, second maximum, minimum, second minimum when he stops.
12. Keep on accepting a number and print the same till user enters 99
13. Accept a multi-digit number
    1. print the number of digits
    2. reverse the number
    3. check whether a number is palindrome
    4. check whether the number is Armstrong number or not
14. Accept a number ‘n’
    1. print multiplication table of ‘n’
    2. print multiplication table till ‘n’

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| 15.  \*  \* \*  \* \* \*  \* \* \* \* | 16.  1   1. 2   1 2 3  1 2 3 4 | 17.  1   1. 2   3 3 3  4 4 4 4 |
| 18.  1  2 3  4 5 6  7 8 9 10 | 19.  1   1. 2   1 2 3  1 2 3 4 | 20.  1  1 2 1  1 2 3 2 1  1 2 3 4 3 2 1 |
| 21.  1  1 2 1  1 2 3 2 1  1 2 3 4 3 2 1  1 2 3 2 1  1 2 1  1 | 22.  1   1. 1   1 1  1 1 1 1 | 23.  1  1 0 1  1 0 0 0 1  1 1 1 1 1 1 1 |
| 24.  1  1 2 3  1 2 3 4 5  1 2 3  1 | 25.  1  2 4  3 6 9  4 8 12 16 | 26.  1 1 1 2  3 2 2 2  3 3 3 4  5 4 4 4 |
| 27.  0  1 0  0 1 0  1 0 1 0 | 28. for n=4  1  3 \* 2  4 \* 5 \* 6  10 \* 9 \* 8 \* 7 | 29.  1 \* 2 \* 3 \* 4 \* 17 \* 18 \* 18 \* 20  5 \* 6 \* 7 \* 14 \* 15 \* 16  8 \* 9 \* 12 \* 13  10 \* 11 |
| 30.  A Pythagorean triplet is a set of three integers a, b, and c such that a2 + b2 =c2. Given a limit, generate all Pythagorean triplets with a value smaller than the limit.  Input: limit = 20  **Output**:  3 4 5  8 6 10  5 12 13  15 8 17  12 16 20 | | |