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M.Tech. M&S–19.C106-FoC Assignment-3

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1. Write a program to add all the natural numbers that are less than 50, divisible by 5 but not divisible by 3.

2. Write a program to compute $\sin(x)$ using the library function. The program also computes it by summing a finite number of terms of an infinite series for $\sin(x)$. The program should print a table with each row showing value of x, value of $\sin(x)$ using library function and the minimum number of terms of series in the sum required to get accuracy of 10^{-3} or better. Do this for at least 10 values of $x \in [\frac{-\pi}{3}, \frac{\pi}{3}]$.

3. Given two positive integers, compute their GCD using the Euclidean algorithm:

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   GCD(a, 0) = a
   GCD(a, b) = GCD(b, a mod b)
   ```

4. Write a program to generate n prime numbers greater than m. The positive integers m, n should be taken from the user.
