Assignment - 23   Full Stack Web Development using Python   MySirG

Iterator, Generator and Decorator

1. Use iter and next method to access all the elements of a given set using while loop
2. Create a generator to produce first n odd natural numbers
3. Create a generator to produce first n even natural numbers
4. Create a generator to produce squares of first N natural numbers
5. Create a generator to produce first n terms of Fibonacci series
6. Create a generator to produce first n prime numbers
7. Create an endless iterator using generator method to produce terms of Fibonacci series
8. Create an endless iterator using generator method to produce Prime numbers
9. Define a function which takes lengths of three sides of a triangle as arguments and display the perimeter or triangle. Define and apply a decorator which checks for the validity of the triangle on the basis of lengths of the side. This makes the perimeter to be displayed when the triangle can exist with the given lengths of the sides.
10. Define a function which calculates HCF of two numbers. Define and apply a decorator to check whether two given numbers are co-prime or not.