OOP with Java Machine Test - 14

March-24/ OOP\_with\_JAVA/014 Time: 02:00hrs

OOP with Java

Diploma in Advance Computing

March 2024

Q1. You are given an interface AdvancedArithmetic which contains a method signature int divisor\_sum(int n). You need to write a class called MyCalculator which implements the interface. divisorSum function just takes an integer as input and return the sum of all its divisors. For example divisors of 6 are 1, 2, 3 and 6, so divisor\_sum should return 12. The value of n will be at most 1000.

Q2. Write the following methods that return a lambda expression performing a specified action:

1. PerformOperation isOdd(): The lambda expression must return true if a number is odd or false if it is even.
2. PerformOperation isPrime(): The lambda expression must return true if a number is prime or false if it is composite.
3. PerformOperation isPalindrome(): The lambda expression must return true if a number is a palindrome or false if it is not.