Introduction to Java Assignment

1. Write a program that reads three coordinate and calculate the side of triangle. Check whether these numbers can be considered as the three sides of a triangle. If so, find the type (isosceles, equilateral or right-angled) and area of the triangle.
2. Write a program to find the roots (real and imaginary) of the quadratic equation of the form $ax^2 + bx + c = 0$.
3. The nos. in the sequence 0 1 1 2 3 5 8 13 21…………. are called Fibonacci nos. Write a program to print the first n (to be taken as input) Fibonacci nos.
4. Write a program for determining whether a number is a Perfect number or not. (e.g. 28 is a Perfect Number because Sum of the Divisor of 28 = 1+2+4+7+14 =28.)
5. Write a program to find the prime factors of the given number . (e.g. Input : 315 Output: 3 3 5 7)
6. Write a program for determining whether a number is a Pearson number or not.
   (e.g. 145 is a Pearson number because 1! + 4! + 5! =145.)
7. Write a program to find all Armstrong numbers in the range 1 to M, where M is taken as input.
8. Write a Program in Python to find the sum of all the Prime numbers between a given range of numbers.
9. Write a program to obtain the sum of the n terms (n to be taken from the user) of the following series $1 - 3^2/2 + 5^3/3 - 7^4/4$..
10. Write a program to obtain the sum of the n terms (n and x to be taken from the user) of the following series $x - x^3/3! + x^5/5! - x^7/7!$ ....