OOP WS2020/21

EXERCISE 1

1. Write a program that displays three messages: **Welcome to Java**, **OOP Programming is fun!**, and **I love java.** (in Exercise_01_01.java)
2. π can be computed using the following formula:
$$\pi = 4 \times \left(1-\frac{1}{3}+\frac{1}{5}-\frac{1}{7}+\frac{1}{9}-\frac{1}{11}+\ldots\right)$$
Write a program that displays the result of $4 \times \left(1-\frac{1}{3}+\frac{1}{5}-\frac{1}{7}+\frac{1}{9}-\frac{1}{11}\right)$
(in Exercise_01_02.java)
3. Write a function **add(a, b)** where a and b are floating numbers. (in Exercise_01_03.java)
4. Write a function **calculatePerimeter(radius)** to calculate the perimeter of a circle. Create your own function signature (in Exercise_01_04.java, Hints: you can use Math.PI to get π)
5. Write a function **calculatePi(denumerator)** see series in question 2, i.e. the question in number 2 is equivalent to calculatePi(11).
Create your own function signature (in Exercise_01_05.java)