Name: Nico Kranni

Pair:

Amount of completed tasks: 10

Which tasks were left undone or incomplete:

Self-assessment:

This exercise was difficult since I am bit rusty.

Doing this exercise, I learned how this works.

I am still wondering about return

Test report

Task	**Input / action**	**Desired output**	**Actual output (use red color if desired output != actual output)**
1	Run code	Hello	Hello
2	E.g. numbers: 2, -5, 4, 7, 9, 11, 0, 445, -100, 4 E.g. strings: abc, 34re5, word, qwerty, cat-doc, def, 4, #-!?bc, alkf, oooooo	Integers: 2, -5, 4, 7, 9, 11, 0, 445, -100, 4 Strings: : abc, 34re5, word, qwerty, cat-doc, def, 4, #-!?bc, alkf, oooooo	Integers: 2, -5, 4, 7, 9, 11, 0, 445, -100, 4 Strings: : abc, 34re5, word, qwerty, cat-doc, def, 4, #-!?bc, alkf, oooooo
3	E.g. numbers: 2, -5, 4, 7, 9, 11, 0, 445, -100, 4	Arranged list: -100, -5, 0, 2, 4, 4, 7, 9, 11, 445 (Don't worry about the formatting, it may be without commas as well.)	Arranged list: -100, -5, 0, 2, 4, 4, 7, 9, 11, 445
4	User inputs integers 5, -34 and 0.	Please give an integer: 5 Please give an integer: -34 Please give an integer: 0 Number of negative integers is: 1	Please give an integer: 5 Please give an integer: -34 Please give an integer: 0 Number of negative integers is: 1
5	User inputs integers 16, -34, 17, 0.	Please give an integer: 16 Please give an integer: -34 Please give an integer: 17 Please give an integer: 0 Number of even integers is: 2	Please give an integer: 16 Please give an integer: -34 Please give an integer: 17 Please give an integer: 0 Number of even integers is: 2
6	User inputs integers -3, 7, 30, 9, 0.	Please give an integer: -3 Please give an integer: 7 Please give an integer: 30 Please give an integer: 9	Please give an integer: -3 Please give an integer: 7 Please give an integer: 30 Please give an integer: 9

		Please give an integer: 0 Sum of positive integers divisible by three is: 39	Please give an integer: 0 Sum of positive integers divisible by three is: 39
7	User inputs 13	Give maximum value: 13 Procession is: 3, 6, 9, 12 Number of terms is: 4 Sumf of terms is: 30 Sum of squared terms is: 270	Give maximum value: 13 Procession is: 3, 6, 9, 12 Number of terms is: 4 Sumf of terms is: 30 Sum of squared terms is: 270
7	User inputs 0	Give maximum value: 0 Procession is: Number of terms is: 0 Sumf of terms is: 0 Sum of squared terms is: 0	Give maximum value: 0 Procession is: Number of terms is: 0 Sumf of terms is: 0 Sum of squared terms is: 0
7	User inputs -15	Give maximum value: -15 Procession is: Number of terms is: 0 Sumf of terms is: 0 Sum of squared terms is: 0	Give maximum value: -15 Procession is: Number of terms is: 0 Sumf of terms is: 0 Sum of squared terms is: 0
8	User inputs R User inputs P User inputs S User inputs S User inputs P	Give your choice (R, P, S): R Computer's choice is Paper. Paper covers Rock. Computer 1 You 0 Give your choice (R, P, S): P Computer's choice is Paper. It's a tie! Computer 1 You 0 Give your choice (R, P, S): S Computer's choice is Paper. Scissors cuts Paper. Computer 1 You 1 Give your choice (R, P, S): S Computer's choice is Rock. Rock crushes Scissors Computer 2 You 1 Give your choice (R, P, S): P Computer's choice is Scissors. Scissors cuts Paper Computer 3 You 1 You lost!	Give your choice (R, P, S): R Computer's choice is Paper. Paper covers Rock. Computer 1 You 0 Give your choice (R, P, S): P Computer's choice is Paper. It's a tie! Computer 1 You 0 Give your choice (R, P, S): S Computer's choice is Paper. Scissors cuts Paper. Computer 1 You 1 Give your choice (R, P, S): S Computer's choice is Rock. Rock crushes Scissors Computer 2 You 1 Give your choice (R, P, S): P Computer's choice is Scissors. Scissors cuts Paper Computer 3 You 1 You lost!
9	Run program multiple times	Random number is: 5 Random number is: 1 Random number is: 6	Random number is: 5 Random number is: 1 Random number is: 6

10.Explain the following terms (use your own words, do not copy paste answers from Internet). You can answer in Finnish or English.

a. Procedural programming

Procedural programming is series of instructions which computer then executes. Program is made up with series of different kind of procedures, which is made of instructions, which may be called by program or by other procedures. It is also used with name of “inline” coding.

b. Functional programming

Functional programming uses immutable variables, it sort of creates/updates the variable it uses straight into variable. Returns only values that it needs for something. It might use other variables but does not change those variables. This prevents “side effects” in code.

c. Object oriented programming

Object oriented programming focuses on encapsulation. It has objects and the variables within objects can only be used within in object. Classes and methods used.

d. Class (in programming)

Class has defined set of properties; it can be inherited. Some describe class as a blueprint. Such as car has make, model, year etc. These are all properties/attributes that can be saved into class.

e. Object (in programming)

Object can be many kinds of things. But most often it is class, or combination of different kind of data.

f. Instance (in programming)

Instance is the “object” (sort of) that gets attributes from the class. Class might have year and model, but instance is the one that has specific information, such as 1997 or model S.

g. Encapsulation (in programming)

It locks class, method, and variables so that they are immutable, but you can create instances from them. It is to protect and hide certain parts of codes. You do not have direct access, but you still can instance them as previously stated.