# Abschlussklausur Modul „Introduction to Python“

Anwendungsbezogene Bioinformatik und Biostatistik 2022-1  
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03.03.2022

## Inner and Outer functions

Create an outer function that will accept two parameters, a and b. Then create an inner function inside the outer function that will calculate the addition of a and b. Call the inner function within the outer function and then add the square of a to the result of the inner function. Return the result added by 5. /6

## Loops

Write a program to accept a number from a user and calculate the sum of all numbers from 1 to a given number. For example, if the user entered 10 the output should be 55 (1+2+3+4+5+6+7+8+9+10). The result should be printed out. /5

## Dictionaries

You have the following dictionary: sample\_dict = {'a': 100, 'b': 200, 'c': 300}. Write a simple if statements to check whether the key ‘b’ is in the dictionary or not. Both cases should contain a print out. /3

Write a second if statement to check if the value 150 is in the dictionary. /3

Given the nested dictionary below set the salary of Brad to 8500.

sample\_dict = {

'emp1': {'name': 'Jhon', 'salary': 7500},

'emp2': {'name': 'Emma', 'salary': 8000},

'emp3': {'name': 'Brad', 'salary': 500}

} /2

/19 ==> % ==> Note: