Mock Test

This is only a mock test. You can test on how to create and name test programs correctly. The mock test is made up of six tasks. The first two tasks (p1.py and p2.py) are already completed. Open these files and see how the tasks have been solved and how you can test a single task.

To check the correctness of all completed tasks, run the check.py program. The results will be saved to a text file.

**Please take into account that during the real test, you have to upload all created files/programs to the Moodle platform for assessment. You will have approximately 60-70 minutes to upload the files, depending on the number of tasks.**

(p1.py) The vending machine accepts 1, 2 and 5 PLN coins. Define the function f(amount\_to\_pay) that returns the minimum number of coins that can be used to pay for the purchased product. Sample result:  
f(23) returns 6  
f(8) returns 3

(p2.py) Define the function f(n1,n2,n3) that returns True if all three numbers n1,n2,n3 are different or False otherwise. Sample result:  
f(4,8,5) returns True  
f(2,9,2) returns False

(p3.py) A text contains any number of words. Define a function f(name) that returns the acronym (first letters of all words). Sample result:  
f("Internet of Things") returns "IoT"  
f("For Your Information") returns "FYI"  
f("Python") returns "P"

(p4.py) The credit card number consists of 16 digits. Define a function f(card\_number) that masks the card number. The function returns a character string in which only the first two and the last four digits of the card number are visible. The remaining digits of the card number are replaced with an asterisk. Sample result:  
f("5290312400019022") returns "52\*\*\*\*\*\*\*\*\*\*9022"

(p5.py) The binary system uses two symbols to represent a number: 0 and 1. Define a function f(binary\_number) that returns True if the given notation is a valid binary number, or false otherwise. Example:  
f("101101") returns True  
f("1311a10100") returns False

(p6.py) Create a function f(number, even) that computes the sum of the digits of a number. When the value of the even parameter is True, the function returns the sum of the even digits. When the value of the even parameter is False, the function returns the sum of the odd digits. Example:  
f(3124,True) returns 6  
f(3124,False) returns 4  
f(20576,False) returns 12  
f(20576,True) returns 8  
f(13115,True) returns 0