



ADAM MICKIEWICZ UNIVERSITY IN POZNAŃ

Faculty of English

Robert Dyzman, M.Sc.Eng.

PYTHON PROGRAMMING

CLASS 03



Run „Teams”

Start your IDE

Start Moodle

AGENDA:

- Create a file „*class_pp_03.py*”
 - GIT
 - Map function
 - Push to GitHub, alternatively Copy/Paste to Teams
-



MAP FUNCTION

- It concerns using lambda functions in programs
- Syntax:

map(func, *iterables) → returns map object

func → lambda expression or pointer to a function

which will be executed on each element of the *iterables

```
>>help(map)
```



MAP FUNCTION

```
# MAP FUNCTION
```

```
L1 = [  
    ('Bread', 10),  
    ('Butter', 20),  
    ('Chocolate dark', 15),  
    ('Chocolate white', 17),  
    ('Cakes', 19)  
]  
  
# transforming the list--> interested only in  
# prices  
L2 = list(map(lambda item: item[1], L1))  
print(L2)
```



MAP FUNCTION

MAP FUNCTION

transforming the list--> increase the prices for 20%

```
L2 = list(map(lambda item: (item[0], item[1]*1.2),  
L1))  
print(L2)
```



EXERCISE 20

'''

Write a program that will raise all the elements of a list to the third power

Input : list of integers,

e.g., num = [1, 2, 3, 4, 5]

Returns : list of integer numbers raised to the third power

use map function

'''



EXERCISE 30

'''

Exercise 30, pp_30.py

Write a program with a function called `map_longest()` that takes a text as a parameter and returns the longest word contained in that text and its length - tuple.

Result of a program should be a message

e.g.,

The longest word in the text is 'decision-making.' with the length of 16 characters

use map function together with lambda, don't deal with punctuation

'''



EXERCISE 40 (homework)

'''

Exercise 40, pp_30.py

Task is the same as in exercise 30 but additionally you have to write & use a function removing punctuation.

Write a program with a function called `map_longest()` that takes a text as a parameter and returns the longest word contained in that text and its length - tuple.

Result of a program should be a message

e.g.,

The longest word in the text is 'decisionmaking.' with the length of 14 characters

use map function together with lambda, don't deal with punctuation

'''