

Your homework is to do problems 1 to 3. You must write all your functions in a python file called `function_homework.py` and save and upload it to a GitHub repository called `function_practice`.

1) Consider the function $f(n) = 6n - 4$:

Please write this function in python. Then call it with the arguments 4, 5, 6, and 7.

2) Consider the function $f(n) = 1 / (3^{n-1})$

Please write this function in python and then call it with the arguments 1,2,3,4 and 5.

3) Consider the function $f(n) = (-1^n) * (3)$. Please write this function in python and then call it with the arguments, 1, 2, 3, 4, and 5.

4) \$250 is invested at a bank that pays 7% simple interest. 在一家银行存入¥250， 单利为7%。
计算1年后， 3年后， 7年后， 20年后的存款金额。

A) First write a function that calculates money in the account as a function of the amount of years.

B) Then Calculate the amount of money in the account after 1 year, 3 years, 7 years, and 20 years.

5) \$325 is borrowed from a bank that charges 4% interest compounded annually. 从一家银行借款¥325， 年复利4%。

A) First write a function that calculates money in the account as a function of the amount of years. 先定义一个函数使用年数来计算存款金额

B) Then Calculate the amount of money in the account after 1 year, 3 years, 7 years. 然后调用你的函数计算1年后， 3年后， 7年后， 20年后的存款金额。

6) Percy has \$10,000 to invest. He can go to Yankee Bank that pays 5% simple interest or Met Bank that pays 4% interest compounded annually. At how many years will Met Bank be the better choice?

Percy 有¥10, 000可供投资。他可以存在Jason Bank， 单利5%， 或存在大都会银行， 年复利4%。要存多少年， 大都会银行才是更好的选择？