Week 2

Write and run your programs with IDLE editor. Submit finished programs to CodeGrade.

IMPORTANT: End each input-command string with a newline symbol \n. For example:
`variable = input("Some text:\n")`

Task 1: Write a program that asks the user for his/her name, an integer and a decimal number. The program stores them in different variables whose name your can decide.
Raise the given decimal to the power of the given integer. Display the result as in the example below using 2 decimal places. End the program by thanking the user.

Example run:

```
Enter your name:
Paula
Enter an integer:
8
Enter a float:
3.46
Decimal 3.46 to power 8 is 20540.39
Thank you for using the program Paula!
```

Task 2: Write a program that asks user's lastname and firstname. The program outputs this user's lut.fi-email address in the form: `firstname.lastname@lut.fi`

Example run

```
Please enter your lastname:
Bond
Please enter your firstname:
James
Your email address is: James.Bond@lut.fi
```

Task 3: Write a program that asks the user for a long word and prints different "slices" of it. Follow the example run.

1. print the first five characters,
2. print the last five characters
3. print the characters 2, 3, 4 and 5
4. print every second character of the word starting with the second letter
5. print the word inside backwards inside the quotation marks

Example run:

```
Enter a long word:
trichotillomania
The first five letters are: trich
The last five letters are: mania
Letters 2, 3, 4 and 5 are: rich
Every second letter of the word: rcoilmna
The word backwards 'ainamollitohcirt'
```

Task 4: Write a program that asks for a word and a number X that is smaller than then number of the letters in this work. The program replaces the Xth character of the given word by *.

Example run:

```
Give a word:
testing
The length of the word is 7
Give an integer smaller than or equal to 7:
2
t*sting
```

Task 5: Write a program that asks for three numbers. The numbers which are inputted can be integers or floats. After this, the program prints to the screen:

1. the sum of the given numbers rounded to 3 decimal places
2. the average of the given numbers rounded to 3 decimal places.
3. the average rounded to the closest integer
4. the average of the given numbers as an integer without the decimal part.

Example run of the program:

```
This program calculates the average of the 3 numbers you enter.
The numbers can be int's or float's
Enter the first number:
5.2342
Enter the second number:
10
Enter the third number:
8.34234
Sum of the numbers: 23.577
Average of the numbers (rounded to 3 decimal places): 7.859
Average of the numbers (rounded to the closest integer): 8
Average of the numbers as an integer without the decimal part: 7
```