Lab 6: Built-in Functions

Objective(s)

- To be able to use built-in functions in Python.

Tool(s)/Software

- Pycharm

  or
- IDLE (Python 3.10 or above)

  or
- https://www.online-python.com/

Description

- Write python programs that solve the following problems:

Tasks/Assignments(s)

Q1:

Write a function in Python that takes four numbers as parameters to calculate the distance between (x1,y1) and (x2,y2). Use the built-in function sqrt().

Hint $=\sqrt{((x2 - x1)^2 + (y2 - y1)^2)}$**.**

Q2:

Modify the **Q1** in such a way that the parameters of the function are two lists with X1 and Y1 belongs to a list named P1, X2 and Y2 belongs to a list named P2.

Q3:

Write a python program to calculate and print the value of X to the power of Y (X^Y). Both values are given by the user. You need to use a built-in function.

Q4:

Write a Python program to print the length and sort the following list: L=["h", "b", "a", "c", "f", "d", "e", "g"]. Use a built-in function.

Q5:

Write a Python program to print the name with the highest and lowest value, ordered alphabetically from the following tuple: names= ('Sarah', 'Ahmed', 'Ahlem', 'Zayed')

Q6:

Write a Python program to create a list of five random floats rounded to the nearest integer.

Deliverables

- Submit the files via blackboard. If blackboard is not working, send an email.
- No submissions or late submissions are penalized (from participation marks).
- Name the document Python_Lab6_StudentName_Q#
- You need to submit 6 files.