Assignment SU5 – Instructions

SU5_1

Write a Python program that asks the user to enter a username and password, and then print out a message that says "Welcome [username], your password is [password]!". Then, ask the user to enter any character, and draw a square. The output of your square should be similar to the example output.

Input/Output example:

```
Enter your username: Jack
Enter your password: TomCat

Welcome Jack  your password is TomCat!

Enter a character: %

Square
%%%%%%%
%%%%%%%
%%%%%%%
%%%%%%%
```

Notes:

- All headings/labels, as seen in the example output, should be presented.
- Use the **input()** function to read input from the user.
- Use the **print()** function to supply output to the user.
- Text (string values) must be in quotation marks.
- Remember to include comments in your script. The first comment should include your student number, surname and name.
- **Submit your Python file (*.py) on eFundi (Assignment SU5): named *SU5_1_studentNumber.py*** (replace studentNumber with your student number)

SU5_2

Write a Python program that asks the user to enter the length and the width of the surface area (rectangle) that needs to be calculated (in cm).

Instructions:

1. Obtain the length and width value from the user – as strings (the default type if you do not define variables; can you define the numbers as strings?).
   - Print the concatenated values.
2. Obtain the length and width values from the user – as integers.
   - Calculate the area of the surface of the rectangle. (area = length x width)
3. Calculate the perimeter of the rectangle.
   - Print the perimeter of the rectangle. (perimeter = 2(length + width))

Combine all the steps into one program.

Input/Output example:

```
Concatenated values
Enter length for the rectangle: 20
Enter the width for the rectangle: 10

Result: 2010

Values to calculate area and perimeter
Enter length for the rectangle:  20
Enter the width for the rectangle: 10

Area: 200

Perimeter: 60
```

Notes:

- Headings/labels should be presented.
- Include comments in your script. The first comment should include your student number, surname and name.
- **Submit your Python file (*.py) on eFundi (Assignment SU5): named *SU5_2_studentNumber.py*** (replace studentNumber with your student number)

Mark allocation rubric

	Item	**Mark allocation**	
5_1	Obtain the username and password from the user		/1
	Obtain the character with which to display the square		/1
	Display the information obtained from the user (appropriate headings)		/1
5_2	Obtain two numbers as string values from the user		/1
	Display the concatenated numbers		/1
	Obtain two numbers as integers from the user		/1
	Display the area value of the numbers		/1
	Display the perimeter of the two numbers		/1
Comments included in programs			/2
File name according to the specification (penalty 2 per script), correct extension (penalty – not marked), only the latest versions submitted (penalty 1 per additional script submission)			
TOTAL			**/10**