

CS 115 - Introduction to Programming in Python

Lab 02

Lab Objectives: Conditional Statements, Loops – for and while, Strings

1. Write a program, `Lab02_Q1.py` that inputs 3 integer values and calculates and displays their sum. However, if one of the values is 13 then it does not count towards the sum and values to its right do not count. For example, if b is 13, then both b and c do not count. The program will stop if 0 is entered as an input to a, b and/or c.

Sample Run: (User inputs are red)

```
Enter first number: 7
Enter second number: 4
Enter third number: 9
Sum of a,b,c: 20
```

```
Enter first number: 13
Enter second number: 7
Enter third number: 5
Sum of a,b,c: 0
```

```
Enter first number: 7
Enter second number: 13
Enter third number: 5
Sum of a,b,c: 7
```

```
Enter first number: 17
Enter second number: 0
Enter third number: 5
```

2. Write a Python script, `Lab02_Q2.py` that does the following:

Use a **for** loop that computes the sum of numbers from a to b (both inclusive) that has 2 as last digit and prints this sum. If a is **not** less than b, the program will output a message.

(Example: if a=28, b=82, then it will print result of 32+42+...+82)

Sample Run:

```
Enter a: 8
```

```
Enter b: 70
```

```
Sum = 222
```

Sample Run:

Enter a: 45

Enter b: 2

45 is not < 2

3. Write a program, `Lab02_Q3.py`, that inputs a set of characters from the user and forms a string by concatenating only the alphabetic characters. The user will continue inputting until ``.`` is entered.

Hint: You can invoke the `isalpha()` function on a character, and it will return `True` if the string is alphabetic, `False` if not. `'5'.isalpha() -> False`.

Sample Run:

Enter a character:2

Enter a character:c

Enter a character:s

Enter a character:.,

Enter a character:

Enter a character:1

Enter a character:.

Formed String = cs