

WCC Python Chapter 7 - Loops and Input - Lab

1.) While Loop

Implement a while loop to print all multiples of 5 from 0 to 50 inclusive.

Output Example

```
0 5 10 15 20 25 30 35 40 45 50
```

2.) Sentinel While Loop

Implement a while loop to request numbers from the console and insert them into a list. If the user enters a -1 stop requesting values. Print all elements of the list. Note that -1 should not be added to the list.

When the data entry completes, print the grade point average.

Output Example

```
Enter a grade or -1 to stop: 75
Enter a grade or -1 to stop: 100
Enter a grade or -1 to stop: 60
Enter a grade or -1 to stop: 90
Enter a grade or -1 to stop: 95
Enter a grade or -1 to stop: -1
The GPA is 84.
```

3.) While Loop and Lists

a) Implement the list: `grades = [96,34,67,88,90]`

b) Use a while loop and list length to remove all failing grades (<64).

c) Use a for loop to print the updated list as seen below.

Output Example

```
96 67 88 90
```

4.) Create a list of the last 6 months of the year July - Dec.

Use a while loop and the enumerate function to print the following:

Output Example

```
7 July, 8 Aug, 9 Sep, 10 Oct, 11 Nov, 12 Dec,
```

5.) Pizza and a Movie (2 points)

Write a loop to

- a) Prompt the user to enter pizza toppings. The user may make one or multiple entries. Provide a sentinel value to allow them to quit.
- b) Prompt the user for their age for the purpose of **computing** the cost of the movie ticket. 3 or younger = free; age 4 – 12 = \$10; Over age 12 = \$12
- c) Print a message informing them of their pizza order.
- d) Print a message informing them of their ticket cost.

Output Example

```
~~~~~ Welcome to Pizza and a Movie ~~~~~
What topping would you like on your pizza (type quit when done)?
anchovies
What topping would you like on your pizza (type quit when done)?
mushrooms
What topping would you like on your pizza (type quit when done)?
spinach
What topping would you like on your pizza (type quit when done)?
quit
How old are you?
19
Your pizza toppings will be anchovies, mushrooms, spinach.
Your movie ticket cost is $12.
```

----- End -----