

Lab 3

Jhonatan Parada Torres

A)

Jhonatan_LAB3 > lab3_1.py > ...

```
4  #I avoided using a loop this time to stay in track with the learned topics
5
6  error_message = "Exceptions: Invalid Input"
7
8  try:
9      bill = float(input("Enter the amount of the bill: "))
10
11      try:
12          percentage = int(input("Enter the percentage of the tip: "))
13
14          tip = bill * (percentage / 100)
15          print(f"Tip: ${tip:.2f}")
16
17      except ValueError:
18          print(error_message)
19
20  except ValueError:
21      print(error_message)
22
```

```
● @jhonatanparada499 →/workspaces/Jhonatan_ET574 (main) $ /home/codespace/.python/
tan_ET574/Jhonatan_LAB3/lab3_1.py
Enter the amount of the bill: 36.99
Enter the percentage of the tip: 18
Tip: $6.66
```

Jhonatan_LAB3 > lab3_2.py > ...

```
1  string = input("Please enter a string: ")
2
3  output = (
4      f"Original Text: {string}",
5      f"First Letter: {string[0]}",
6      f"Last Letter: {string[-1]}",
7      f"Reversed Text: {string[::-1]}"
8  )
9
10 print(*output, sep='\n')
11
```

```
• @jhonatanparada499 → /workspaces/Jhonatan_ET574 (main) $ /home/codespace/
tan_ET574/Jhonatan_LAB3/lab3_2.py
Please enter a string: Python
Original Text: Python
First Letter: P
Last Letter: n
Reversed Text: nohtyP
```

```
Jhonatan_LAB3 > lab3_3.py > ...
```

```
27 error_message = "Exceptions: Invalid Input"
28
29 dictionary = {
30     "first": 0,
31     "second": 0,
32     "third": 0
33 }
34
35 for key,value in dictionary.items():
36     try:
37         dictionary[key] = int(
38             input(
39                 f"Please enter the {key} integer: "
40             )
41         )
42     except ValueError:
43         print(error_message)
44         exit
45
46 dict_values = dictionary.values()
47
48 non_sorted_values = list(dict_values)
49
50 dictionary["third"] = max(non_sorted_values)
51 dictionary["first"] = min(non_sorted_values)
52
53
54 for value in non_sorted_values:
55     if value != dictionary["first"] and value != dictionary["third"]:
56         dictionary["second"] = value
57         sorted_values = list(dict_values)
58
59 print("Before sorting: ",*non_sorted_values)
60 print("After sorting: ",*sorted_values)
```

```
• @jhonatanparada499 → /workspaces/Jhonatan_ET574 (main) $ /home/codespace/
tan_ET574/Jhonatan_LAB3/lab3_3.py
Please enter the first integer: 7
Please enter the second integer: 8
Please enter the third integer: 1
Before sorting: 7 8 1
After sorting: 1 7 8
```

Jhonatan_LAB3 > lab3_4.py > ...

```
1  #A
2  # phoneNum = 718-710-4756
3  # print("QCC phone number is " + phoneNum + '.')
4
5  phoneNum = '718-710-4756'
6  print("QCC phone number is " + phoneNum + '.')
7
8  #B
9  # finally = "happily ever after."
10 # print("They lived " + finally)
11
12 finally_ = "happily ever after."
13 print("They lived " + finally_)
14
15 #C
16 # age = 20
17 # print("I am " + age + " years old.")
18
19 age = 20
20 print("I am " + str(age) + " years old.")
21
22 #D
23 # age = input("Enter your age: ")
24 # print("Next year you will be " + (age+1))
25
26 age = input("Enter your age: ")
27 print("Next year you will be " + str((int(age)+1)))
28
```

```
● @jhonatanparada499 → /workspaces/Jhonatan_ET574 (main) $ /home/codespac
tan_ET574/Jhonatan_LAB3/lab3_4.py
QCC phone number is 718-710-4756.
They lived happily ever after.
I am 20 years old.
Enter your age: 18
Next year you will be 19
```

B)

The most challenging part for me was lab3_3.py because I did not want to write three `input("first", "second"...) lines asking for each number`, so by using dictionary lists I could automate that task easily in a loop, but that created new problems as well, this time I had

to sacrifice elegance in it; I also learned to use try statements to handle errors. In the future I want to learn how to manipulate and work with dictionaries better.