Python Exam

2nd Chance

Exam Guidelines

1. The exam estimated time: **120 minutes**

2. Cheating will be considered as grade of 0

3. Internet and materials are allowed to be used during the exam

4. Asking questions is allowed in the Zoom chat

5. The exam assembled from 3 missions

6. The exam answers should be submitted to the Technion module as document file - if you are don't have office - its ok to use Notepad.

GOOD
LUCK

TECHNION
Azrieli Continuing Education and
External Studies Division

Mission 1: Multiple-choice Questions (30 pts)

Choose the correct answer and describe it with one line sentence.
Please submit the question number and the answer letter.

1.1. What is the output of the following Python code?

```
num = 12
name = "Examiner"
print(f"Its been a {num} years experienced {name}")
```

    a)   Its been a 12 years experienced Examiner
    b)   Its been a 12 years experienced examiner
    c)   Error
    d)   Nothing

1.2. What is the output of the following Python code?

```
for i in range(9):
    print(i)
    break
```

    a)   9
    b)   0 1 2 3 4 5 6 7 8
    c)   1 2 3 4 5 6 7 8 9
    d)   0

1.3. What is the value stored inside variable **longs**?

```
longs = len(["hello",2, 4, 6])
```

    a)   8
    b)   5
    c)   4
    d)   1

1.4. What is the output of the following Python code?

```
word = "CyberSecurity"
if word.isdigit():
    print("Blop")
elif word.isalpha():
    print("Blip")
else:
    print("BlipBlop")
```

    a)   Blip
    b)   Blop

c) BlipBlop
d) Nothing

1.5. What is the output of the following Python code?

```
word = "theindex"
print(word[0]+word[-1]+word[-9])
```

a) Error
b) txt
c) txh
d) tix

Mission 2: Snippets (30 pts)

Provide a code snippet or script file that will follow the next tasks

Please submit the code in a txt file or python file - you could merge all scripts in the same file as well.

2.1. Write a program that takes the next list of numbers and print out all the odd numbers:

```
numbers = [10,1165,112,632,66]
```

2.2. Write a program that takes the next list of words and print out only words contains the "o" letter as part of the word

```
names = ["Michel", "Robin", "Sara", "Michele"]
```

2.3. Write a program that takes the next dictionary and output its keys and values in the next form:
"Alpha is 10, Beta is 20.25 and Gamma is 30"

Provided dictionary:

```
my_dict = {"alpha":"10","beta":"20.25","gamma":30}
```

Mission 3: Programming (40 pts)

In the next mission you will write a complicated program, please provide the full script file as answer.

Please submit the python scripts in .py file that you are creating in advance.

Provided with the next file:
https://raw.githubusercontent.com/danielmiessler/SecLists/master/Discovery/Web-Content/common.txt

a) Load the list into your python script using requests library or a basic file read operation
b) Create a new file contains only passwords starts with "." - call this file "dotted-files.txt"
c) Create another file contains only passwords with a length greater then 15
d) Output to the user how many times the letter "a" and "e" repeated in the file.

Output example (the number of repeats is not correct in the example):
"The letter a appears 110 times, and the letter e appears 202 times"
"a appears 110 times, e appears 202 times"