מגיש: אביחי חדד(209286665)

**תרגיל 1:** קוד:

def main():

# getting an input of a string from the user.

sentence = input("Enter your sentence: ")

# declaring a variable that contains the inputted

# string with only letters.

letters = filter\_non\_letters(sentence)

# changing the letters to lower-case

letters = letters.lower()

# checking if the inputted string doesn't contain letters at all.

if letters == "":

print("Please enter a sentence with letters next time.")

# stopping the function.

return

# printing the largest and smallest letters in the inputted string.

print("Largest and smallest alphabet are: %s %s" %

(largest\_letter(letters), smallest\_letter(letters)))

# running main function.

main()

חלק א'

חלק ב'

# 1-

def filter\_non\_letters(string):

""" Function filter\_non\_letters gets a string

and returns a string with only letters.

"""

letters\_string = ""

for char in string:

if char.isalpha():

letters\_string += char

return letters\_string

def largest\_letter(string\_of\_letters):

""" Function largest\_letter gets a string

and returns the maximum letter of that string.

"""

return max(string\_of\_letters)

def smallest\_letter(string\_of\_letters):

""" Function smallest\_letter gets a string

and returns the minimum letter of that string.

"""

return min(string\_of\_letters)

פלט:

|  |  |  |
| --- | --- | --- |
| א | Hello 2&3 ! |  |
| ב | [Have a Nice Day](https://www.google.com/search?rlz=1C1CHBH_enIL715IL715&q=have+a+nice+day&stick=H4sIAAAAAAAAAOPgE-LRT9c3LDTNqjA0z0lR4tLP1TcwzC7LqszWUs9OttLPLS3OTNYvSk3OL0rJzEuPT84pLS5JLbJKyywqLlFIzEkqzV3Eyp-RWJaqkKiQl5mcqpCSWLmDlREA2caZL1oAAAA&sa=X&ved=2ahUKEwilhKqHpYTsAhXHilwKHV0AAscQmxMoATAFegQICxAD) |  |
| ג | 3$!!@@^^^ |  |

**תרגיל 2:** קוד:

# 2-

def remove\_duplicates\_chars(string):

""" Function remove\_duplicates\_chars gets a string

and returns the string without any double chars.

"""

# declaring an empty string the will contain a

# string without double chars.

new\_string = ""

# running in a loop len(string) - 1 times.

for i in range(len(string) - 1):

# checking if the there is duplicate char

if string[i] == string[i + 1]:

# skip the iteration.

continue

# if not duplicate char, adds the char to "new\_string".

new\_string += string[i]

# adding the last letter to "new\_string".

new\_string += string[-1]

return new\_string

def main():

# getting an input of a string from the user.

sentence = input("Enter a string, please: ")

# printing the new string without duplicates.

print("After removing all duplicates:", remove\_duplicates\_chars(sentence))

# running main function.

main()

|  |  |  |
| --- | --- | --- |
| **פלט** | **קלט** | **הרצה** |
|  | Abbc 55gkk | א' |
|  | Copper is commonly used as electrical wiring | ב' |
|  | Just kiddding | ג' |

פלט:

**תרגיל 3:** קוד:

חלק א'

def print\_letters\_separately(string):

""" Function print\_letters\_separately gets a string

and prints the letters in separate lines.

"""

# declaring an empty string the will contain a

# string with \n between letters.

new\_string = ""

# running in a loop len(string) times.

for i in range(len(string)):

# checking if the char(string[i]) doesn't contain a space or tab.

if string[i] == " " or string[i] == "\t":

# checking if the "new\_string" not ends with "\n",

# and new\_string is empty(in case we have space in the beginning).

if not new\_string.endswith("\n") and new\_string != "":

# adds "\n" in the end of the "new\_string",

# that represent the place of a space between letters,

# will print empty line in each char if we print "new\_string".

new\_string += "\n"

else:

# if there is not space, and we are between letters.

# adds the char(string[i]) to "new\_string".

new\_string += string[i]

# print the "new\_string" with \n between letters.

print(new\_string)

חלק ב'

def main():

# running an endless loop.

while True:

# getting an input of a string from the user.

sentence = input("Enter a string, please: ")

# checking if the inputted string is empty.

if sentence == "":

print("Finish")

# stopping the while.

break

# calling "print\_letters\_separately" with the inputted string.

print\_letters\_separately(sentence)

# running main function.

main()

|  |  |
| --- | --- |
| **פלט** | **הרצה** |
|  | א' |
|  | ב' |
|  | ג' |
|  | ד' |

פלט: