Tema 4

import random

# Ex 1

masini = ['Audi', 'Volvo', 'BMW', 'Mercedes', 'Aston Martin', 'Lastun', 'Fiat', 'Trabant', 'Opel']

# for x in range(len(masini)):

# print(f'Masina mea preferata este {masini[x]}.')

#

# for x in masini:

# print(f'Masina mea preferata este {x}.')

#

# i = 0

# while i < len(masini):

# print(f'Masina mea preferata este {masini[i]}.')

# i += 1

# Ex 2

# for x in range(len(masini)):

# masini[x] = masini[x].upper()

# masini[0], masini[-1] = masini[0].capitalize(), masini[-1].capitalize()

# else:

# print(masini)

# Ex 3

# for x in masini:

# if x == 'Mercedes':

# print('Am gasit masina dorita de dvs.')

# break

# else:

# print(f'Am gasit masina {x}. Mai cautam')

# Ex 4

# for x in masini:

# if x == 'Trabant' or x == 'Lastun':

# continue

# print(f'S-ar putea sa va placa masina {x}.')

# Ex 5

# masini\_vechi = []

# for x in masini:

# if x == 'Lastun':

# masini\_vechi.append(x)

# masini[5] = 'Tesla'

# if x == 'Trabant':

# masini\_vechi.append(x)

# masini[7] = 'Tesla'

# print(f'Modele vechi: {masini\_vechi}\nModele noi: {masini}')

# Ex 6

# pret\_masini = {

# 'Dacia': 6800,

# 'Lastun': 500,

# 'Opel': 1100,

# 'Audi': 19000,

# 'BMW': 23000

# }

#

# for key, value in dict.items(pret\_masini):

# if value < 15000:

# print(f'Pentru un buget sub 15000 euro puteti alege masina {key}.')

# Ex 7

numere = [5, 7, 3, 9, 3, 3, 1, 0, -4, 3]

# numar3 = 0

# for x in numere:

# if x == 3:

# numar3 += 1

# print(f'Numarul 3 apare de {numar3} ori in lista')

# Ex 8

# suma = 0

# for x in numere:

# suma += x

# print(f'Suma numerelor din lista este {suma}.')

# Ex 9

# numar\_max = 0

# for x in numere:

# if x > numar\_max:

# numar\_max = x

# print(numar\_max)

# Ex 10

# numere\_noi = [-abs(x) for x in numere]

# print(numere\_noi)

# Ex optional 1

alte\_numere = [-5, 7, 2, 9, 12, 3, 1, -6, -4, 3]

# numere\_pare = []

# numere\_impare = []

# numere\_pozitive = []

# numere\_negative = []

#

# for x in alte\_numere:

# if x % 2 == 0:

# numere\_pare.append(x)

# else:

# numere\_impare.append(x)

# if x > 0:

# numere\_pozitive.append(x)

# else:

# numere\_negative.append(x)

# print(f'Numere pare: {numere\_pare}'

# f'\nNumere impare: {numere\_impare}'

# f'\nNumere pozitive: {numere\_pozitive}'

# f'\nNumere negative: {numere\_negative}')

# Ex 2 optional

# alte\_numere = [-5, 7, 2, 9, 12, 3, 1, -6, -4, 3]

# swaped = True

# while swaped:

# swaped = False

# for x in range(len(alte\_numere) -1):

# if alte\_numere[x] > alte\_numere[x+1]:

# alte\_numere[x], alte\_numere[x+1] = alte\_numere[x+1], alte\_numere[x]

# swaped = True

# print(alte\_numere)

# Ex 3 optional

# numar\_secret = random.randint(1,3)

# numar\_ghicit = None

# while numar\_secret:

# numar\_ghicit = int(input('Alege un numar intre 1 si 30 '))

# if numar\_secret > numar\_ghicit:

# print(f'Numarul secret {numar\_secret} e mai mare')

# break

# elif numar\_secret < numar\_ghicit:

# print(f'Numarul secret {numar\_secret} e mai mic')

# break

# else:

# print('Felicitari! Ai ghicit!')

# break

# Ex 4 optional

# randuri = int(input('Introdu un numar de randuri: '))

# for x in range(randuri):

# for y in range(x+1):

# print(x+1,end='')

# print()

# Ex 5 optional

# tastatura\_telefon = [

# [1, 2, 3],

# [4, 5, 6],

# [7, 8, 9],

# [0]

# ]

#

# for lista in tastatura\_telefon:

# for x in lista:

# print(f'Cifra curenta este {x}')