CodeX Computing Co.
Turning Challenges Into Innovative Solutions

Issue Date: 5th March, 2025

Due Date: 10th March, 2025

Submit a Word file (.docx/.pdf) containing all task's code screenshots, their output screenshots, with explanations if needed. Also, create a separate Python (.py) files for each question and create a .zip file and that zip file should be submitted at GCR.

Python Assignment 01 Task

1. Calculate the body mass index (BMI) of two variables input by the user.
   BMI Calculation Formula = weight/ (height)^2.
2. Write a program to make a simple console based calculator performing the four basic operations (+, -, *, /) on two numbers input by user.Your program should ask the user which operation he/she wants to perform and gives the output accordingly.
3. Write a program to count all the even numbers in that given list and print the count.
   list = [2,4,6,5,3,8,2,6,6,4]
4. Write a program that returns the sum of all the elements in the given list of task 3.
5. Write a program that should delete all elements in the list less than 4. use the list given in task 3.
6. Write a program to take marks of 3 subjects as input by user and store them in a dictionary having appropriate keys. Using that dictionary calculate average and percentage of those marks.
7. Write a Python program to get the largest number from a list input from user. use the list given in task 3.
8. Write a python program that take 10 inputs from the user using loop and append the every user input value in the list and calculate the sum of all numbers.

9. Write a python program that take 5 subjects marks from the user and then check the condition if input marks > 100 then show the output " Invalid Input", if input marks >= 50 but <= 100 then show " Pass" otherwise show "Fail".
10. Write a Python program to create the multiplication table (from 1 to 10) of a number.
    Expected Output:
    Input a number: 6 (should be user input)
    6 x 1 = 6
    6 x 2 = 12
    6 x 3 = 18
    6 x 4 = 24
    6 x 5 = 30
    6 x 6 = 36
    6 x 7 = 42
    6 x 8 = 48
    6 x 9 = 54
    6 x 10 = 60
    (table should be print same as above sequence and values)

Resources

Tuples in Python:
https://youtu.be/PipsOUDKrVk?si=d8vrjf2jGKUf7NMH
Dictionaries in Python:
https://youtu.be/j2G68uQtOwM?si=uyhuMszqh1wXIIrl
Python Lists:
https://youtu.be/eF6nK5bSlmg?si=AF5mphSyvFaC0847
Python While Loops:
https://youtu.be/-tCFyIyKVx0?si=UQTJ-jrZvJPDVpaW
Python For Loops:
https://youtu.be/fIYVzKp0q5w?si=RyNadVQ1th6H8SRk