Syrian Arab Republic

Lattakia - Tishreen University

Department of Communication and electrical engineering

5th , Network Programming : Homework No1

الجمهورية العربية السورية

اللاذقية -جامعــة تشريـــن

كلية الهندسة الكهربائية والميكانيكية

قسم هندسة الاتصالات والالكترونيات

السنة الخامسة: وظيفة1 برمجة شبكات

Name:_____, Number:_____, Submitted To GitHub:_____

First Network Programming Homework

Question 1: Python Basics?

A-If you have two lists, L1=['HTTP','HTTPS','FTP','DNS'] L2=[80,443,21,53], convert it to generate this dictionary **d={**'HTTP':80,'HTTPS':443,'FTP':21,'DNS':53 **}**

B- Write a Python program that calculates the factorial of a given number entered by user.

C- L=['Network' , 'Bio' , 'Programming', 'Physics' , 'Music']

In this exercise, you will implement a Python program that reads the items of the previous list and identifies the items that starts with 'B' letter, then print it on screen.

Tips: using loop, 'len ()' , startswith() methods.

D: Using Dictionary comprehension, Generate this dictionary d={0:1,1:2,2:3,3:4,4:5,5:6,6:7,7:8,8:9,9:10,10:11}

Question 2: Convert from Binary to Decimal

Write a Python program that converts a Binary number into its equivalent Decimal number.
The program should start reading the binary number from the user. Then the decimal equivalent number must be calculated. Finally, the program must display the equivalent decimal number on the screen.
Tips: solve input errors.

Question 3: Working with Files" Quiz Program"

Type python quiz program that takes a text or json or csv file as input for (20 (Questions, Answers)). It asks the questions and finally computes and prints user results and store user name and result in separate file csv or json file.

Question 4: Object-Oriented Programming - Bank Class

Define a class BankAccount with the following attributes and methods:
Attributes: account_number (string), account_holder (string), balance (float, initialized to 0.0)
Methods:deposit(amount), withdraw(amount) , get_balance()

- Create an instance of BankAccount, - Perform a deposit of $1000, - Perform a withdrawal of $500.
- Print the current balance after each operation.
- Define a subclass SavingsAccount that inherits from BankAccount and adds interest_rate Attribute and apply_interest() method that Applies interest to the balance based on the interest rate.
  And Override print() method to print the current balance and rate.
- Create an instance of SavingsAccount , and call apply_interest() and print() functions.

Notes "! important"

- Homework is accepted as **well explained** Pdf & "Nicely Formatted Code" "You can do all job in one notebook then print as pdf or "copy and paste" on word document "use" then convert into pdf with extra info "
-You have to show:
  Question number >>Question itself>> your answer code with explanations > your Result "you can use this doc as template"
-You Have to Show code execution as Screenshots from your laptop or phone''.
-Apply your full name and number, Homework number to pdf.
-Similar Solutions will rejected and not accepted.
- The Homework is accepted until the date of "27/5/2024", if after >> mark=mark- (current_date -27/5/2024)*0.3
- upload your code to your GitHub Account, "PDF + Code"