Programming Fundamentals

Assignment 1 Clo2

Due Date: 9 Sep 2022

Note: Do not copy Pseudo from internet or any other source. You should know each line of your code. Those who will try they will get some marks for their effort even you do not get perfect solution. Copied & Shared work will score in negative grading. Assignment should be hand written. After submission, no excuse will be entertained. No assignment will be accepted after due date.

Write a pseudocode of the following questions and display the results of only those questions, which I have asked to display:

Q1. Display the message "Enter two numbers".

Q2. Assign the sum of variables x, y, and z to variable p and display p.

Q3. Obtain values for variables s, r, and t from the keyboard.

Q4. Display the sum of x, y and z.

Q5. Print or display an Integer (Entered by the User).

Note: (specify int while declaring variable like this: Declare/read x as int or Declare/read x,y,z as int)

Q6. Obtain two numbers from the keyboard, compute their sum and display the result.

Q7. Take value of F from user and convert Fahrenheit to Celsius using following formula: C = 5/9(F − 32) display the result.

Note: (declare F and C as float)

Q8. Multiply Two Floating-Point Numbers display the result.

Note: (specify float while declaring variable)

Q9. Calculate the area and perimeter of a rectangle and display them both.

Note: (use area variable to calculate area and peri for calculation of perimeter. *Formula: Area=width*length and Perimeter= 2*(width*length))*

Q10. Calculate the area and perimeter of a Square and display them both.

*Formula: Area=side*side and Perimeter= 4*side*

Q11. Calculate the average of three numbers from user and display the average.

Note: (declare average as float as average can be in decimal due to division)

Q12. Swap Two Numbers x and y display the result.

Note: (you are going to need a third variable to store the value of first variable).

Q13. Compute Quotient and Remainder by asking Dividend as “div” and Divisor as “dis” from the user. Use q and r for quotient and remainder variables. Also, display the Quotient and remainder.

Q14. Write a program that plays a word game with the user. The program should ask the user to enter the following:

- His or her name
- His or her age
- The name of a city
- The name of a college
- A profession
- A type of animal
- A pet’s name

After the user has entered these items, the program should display the following story, inserting the user’s input into the appropriate locations: There once was a person named ***NAME*** who lived in ***CITY*** . At the age of ***AGE*** , ***NAME*** went to college at ***COLLEGE*** . ***NAME*** graduated and went to work as a ***PROFESSION*** . Then, ***NAME*** adopted a(n) ***ANIMAL*** named ***PETNAME*** . They both lived happily ever after!

Q15. Last month Joe purchased some stock in Acme Software, Inc. Here are the details of the purchase:

- The number of shares that Joe purchased was 1,000.
- When Joe purchased the stock, he paid $45.50 per share.
- Joe paid his stockbroker a commission that amounted to 2% of the amount he paid for the stock.

Two weeks later Joe sold the stock. Here are the details of the sale:

- The number of shares that Joe sold was 1,000.
- He sold the stock for $56.90 per share.
- He paid his stockbroker another commission that amounted to 2% of the amount he received for the stock.

Write a program that displays the following information:

• The amount of money Joe paid for the stock.

• The amount of commission Joe paid his broker when he bought the stock.

• The amount that Joe sold the stock for.

• The amount of commission Joe paid his broker when he sold the stock.

• Display the amount of profit that Joe made after selling his stock and paying the two commissions to his broker. (If the amount of profit that your program displays is a negative number, then Joe lost money on the transaction.)

Good Luck…