



CL-1002

Programming Fundamentals

Lab # Task Week1

Objectives:

- Exhibit the understanding of pseudocode.

Note: Carefully read the following instructions (*Each instruction contains a weightage*)

1. Use proper **font family** and **font size** of **heading**, **sub heading** and **normal text**.
2. First think about statement problem then write/draw your logic on copy.
3. Write pseudocode of every task on **page**.
4. Submit the tasks in next lab
5. **Do not copy from any source otherwise you will be penalized with negative marks.**

Problem: Write pseudocode of following programs

1. Write a program logic that calculates the total of a retail sale. The program should ask the user for the following: the retail price of the item being purchased and the sales tax rate. Once the information has been entered the program should calculate and display the following: the sales tax for the purchase and the total sale.
2. Write the steps to calculate the percentage of student marks based on Math, Science, English, and Urdu. (Percentage = (Obtained / Total) * 100)
3. A brand offered 10% discount on each shirt purchased. Take the original price of shirt from user, find the discounted price of one shirt. Write the pseudocode for this problem statement.
4. Write a program that take marks of three students in a class, and calculates the average marks of that class.
5. Write pseudocode to add bonus of 100\$ to each person whose salary is greater than 1500\$.
6. Write a pseudocode to check whether a number is even or odd.
7. Write pseudocode to check whether a character is Vowel or Consonant.
8. Write pseudocode to that year input from user and check whether it's Leap Year or Not (year exactly divided by 4 is leap year, like 2000, 2004, 2008 etc)
9. Write pseudocode to read the age of a candidate and determine whether it is eligible for casting his/her own vote or not. **Eligibility (age >= 18)**
10. Write pseudocode to read the total marks of student and determine the grade of student
Total marks greater than 80, grade is A+
Total marks greater than 75, grade is A



Total marks greater than 70, grade is B

Total marks greater than 65, grade is C

Total marks greater than 60, grade is D

Total marks greater or equal to than 50, grade is E

Otherwise, grade is F

11. Write a pseudocode to take weather and determine the condition of weather on the following conditions:

Weather is greater than 45, WARM

Weather is greater than 20, NORMAL

Weather is less than or equal to 20, COOL

Otherwise, False input

Best of Luck 😊

You need to done with your exercise within given time.