INDIAN SCHOOL AL GHUBRA

CLASS XI COMPUTER SCIENCE 2023-2024

DATE: .07-08-2023 , MONDAY

LAB ASSIGNMENT 21

A new born baby is kept in a cot in a hospital; the temperature of the baby is monitored every 10 minutes for a period of 2 hours. The temperature of the baby is recorded in degrees Celsius to one decimal place and must be within the range 36.0°C to 37.5°C.

To simulate the monitoring required, write a Python program that allows entry of the baby’s temperature in degrees Celsius. The routine should check whether the temperature is within the acceptable range, too high or too low and output a suitable message in each case. Your program should output the highest and lowest temperatures and calculate the difference between these temperatures too. For a baby who has a temperature difference of more than one degree Celsius, and/or has been outside the acceptable range more than twice, output a suitable message. Your program must include appropriate prompts for the entry of data. Error messages and other outputs need to be set out clearly and understandably. All variables, constants and other identifiers must have meaningful names.

LAB ASSIGNMENT 22

Write a program to exchange the first-half elements of a list with the second half elements. Assume the list is having even number of elements. For eg: if the list L=[10,20,30,40,50,60] then the output after exchange should be [40,50,60,10,20,30]

Also display the sum of the elements of the first half and second half, separately.

LAB ASSIGNMENT 23

Write a program to shift all positive elements to the right and negative to the left of a list.

Example

The original list is [8,-5,0,3,-2,1,-4,7,-7,3]

The resultant list has to be [-5, -2, -4, -7, 8, 0, 3, 1, 7, 3]

LAB ASSIGNMENT 24

WAP to display the unique and duplicate items of a given list, separately.

L=[1,2,1,3,4,3,4,3,2,4,5,6]

Duplicated elements of the list are 1, 2, 3, 4

Unique elements in the list are 5, 6