

Total Marks: 50

Due Date and Time: February 5, 2021 6 pm

Submission Procedure: Upload the C program files and text file with names as specified in the problems by the due date and time. Replace ROLLNO with your roll number (all small letters).

Do not upload exe files.

Problem 1. Write a C program called ROLLNO_circle.c that asks the user to enter a double value as input for the radius of a circle and prints as output, the area and circumference of the circle. Meaningful messages should be printed when a user is asked to provide an input and when output values are printed. Units for output values should be printed wherever appropriate.

Marks: 10

Problem 2. Write a C program called ROLLNO_time_conversion.c that takes as input an integer value representing time in seconds and then prints as output the same time in minutes and in hours. (For example, 1800 sec = 30 min = 0.5 hrs.) Meaningful messages should be printed when a user is asked to provide an input and when output values are printed. Units for output values should be printed wherever appropriate.

Marks: 10

Problem 3. A C program called simple_interest.c is provided. The aim of the program is to compute the maturity amount of a deposit using simple interest calculation. The program takes as input the principal amount, interest rate per year, and time period in number of days. It then computes the final maturity amount at the end of the time period and prints it as output. It is assumed that the number of days in a year is 365.

There are mistakes in the code. You need to correct the code and upload the corrected program with the filename ROLLNO_simple_interest.c. You also need to upload a text file called ROLLNO_errors.txt in which you list all the mistakes found and specify how it was corrected.

Marks: 30