LAB02-TASK01

Write a C program of a simple scientific calculator that allows users to calculate the following:

- square value, cube value, square root value AND cube root value
- area of circle, triangle AND rectangle
- volume of cylinder AND prism

Your program should display the appropriate error messages when a user keys in a wrong input

Sample Run 1

What would you like to do today?

a. Calculate square
b. Calculate cube
c. Calculate square root
d. Calculate cube root
e. Calculate area of circle
f. Calculate area of triangle
g. Calculate area of rectangle
h. Calculate volume of cylinder
i. Calculate volume of prism

b

Please insert value: 5

Cube value of 5 = 125

Sample Run 2

What would you like to do today?

a. Calculate square
b. Calculate cube
c. Calculate square root
d. Calculate cube root
e. Calculate area of circle
f. Calculate area of triangle
g. Calculate area of rectangle
h. Calculate volume of cylinder
i. Calculate volume of prism

h

Please enter radius: 7

Please enter height: 7

Volume of cylinder = 1078

LAB02-TASK02

Data below is based on the parking charges at KLIA.

Write a C program for a parking meter calculator based on the hourly charges below:

HOURS	RATE
1st - 3rd hours	RM4.00/hour
4th - 5th hours	RM3.00/hour
6th - 9th hours	RM2.50/hour
10th - 18th hours	RM2.00/hour
Maximum a day	RM46.00

After the 24th hour, the normal rates will be re-applied on top of the previous charges. For any parking that exceeds 36 hours, a discount of 10% will be deducted from the overall bill.

Your program should display the appropriate error messages when a user keys in a wrong input

Sample Run 1

Enter number of days: 0

Enter number of hours of current day: 18

Total charges: RM 46.00

Sample Run 2

Enter number of days: 1

Enter number of hours of current day: 15

Total charges: RM 77.40

LAB02-TASK03

Write a C program for a recursive function in C to find GCD (greatest common divisor) of two numbers.

Your program should display the appropriate error messages when a user keys in a wrong input

Sample Run

Enter two positive integers: 12 30

GCD of 12 and 30 is 6

For submission as Lab Attendance, please include the following:

1. LAB01-TASK01.c
2. LAB01-TASK02.c
3. LAB01-TASK03.c
4. Upload your file to UKMFolio