

# ESC101: Fundamental of Computing

## Lab 2: Wednesday

1. Write a C program to check whether the given 3 sides form a triangle or not. [20]
2. Write a C program to calculate and display the combined resistance when the three resistors R1, R2, R3 are connected in parallel. Your program should produce the display:

**The combined resistance, in ohms, is \_\_\_\_\_**

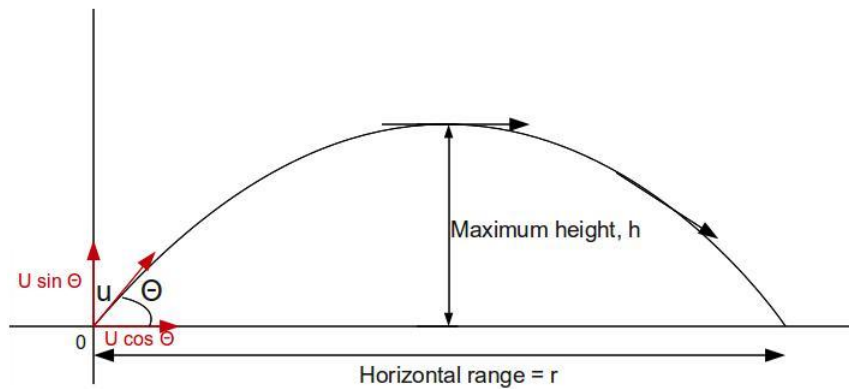
where the underlined spaces are to be replaced by the value of the combined resistance computed by the program. [20]

3. Write a program to input the number of days and print them in months, week, and day format. Assume that a month contains 4 weeks and 1 week contain 7 days.

For eg:

121 = 4 months, 1 Week, 2 Days [20]

4. A ball is thrown with a velocity of  $v$  m/s making an angle of  $30^\circ$  with the ground. Calculate



the range of the projectile and the maximum height attained by it. Print your answers **correct to 3 decimal places**. Assume  $g=9.807 \text{ m/s}^2$  [40]