PROGRAMMING EXERCISE 2

1. Write a program to allow the user to enter the length and width of a rectangle and calculate the area. If the length and width are equal, output: "**`This is a square of area ……`**". Otherwise, output: "**`This is a rectangle of area ……`**". Output the area in two decimal places.

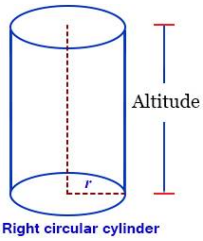
Evidence 1: Your program code

Evidence 2: Screenshot of running the program with two test data

2. Allow user to input up to three sets of diameter and altitude of a right circular cylinder. Compute the area of the base and the volume in litres (L); 1L = 1000 cm^3. Include appropriate column headings.

Output

Diameter, cm	Altitude, cm	Base Area	Volume
37.40	45.50	xxxxx.xx	xxxxxx.xx
20.30	12.80	xxxxx.xx	xxxxxx.xx
12.70	51.30	xxxxx.xx	xxxxxx.xx



Right circular cylinder

Evidence 3: Your program code

Evidence 4: Screenshot of running the program with the three sets of values

3. Read in an amount in cents between 0 and 60000. Write a program to break down that amount into fewest number of \$10, \$5, \$1, 50¢, 20¢, 10¢, 5¢, and 1¢ as is possible.

For example: 54321¢ = 54 × \$10 + 3 × \$1 + 1 × 20¢ + 1 × 1¢

Evidence 5: Your program code

Evidence 6: Screenshot of running program with the following test data: 48878¢, 9368¢, 256¢, 90¢