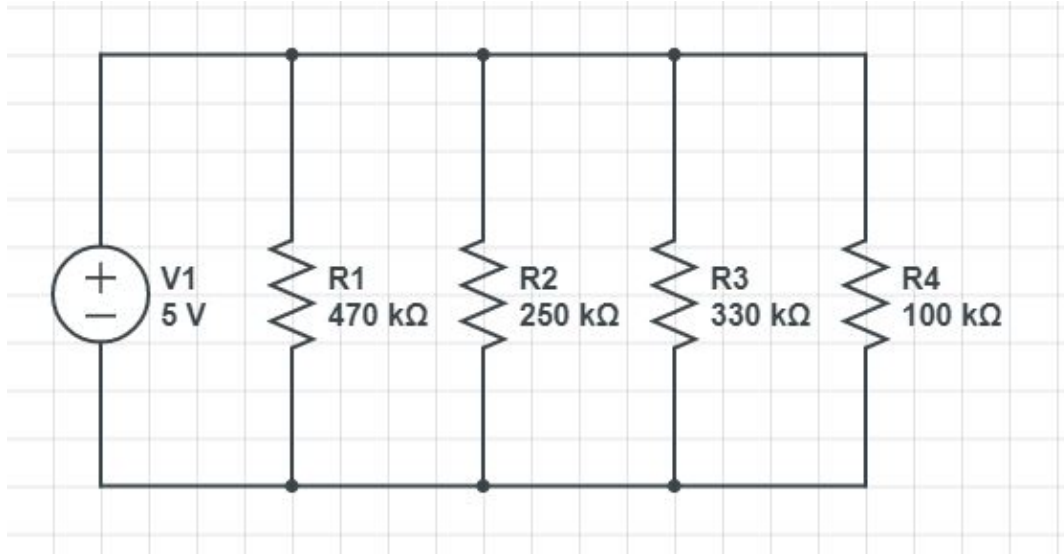


## Pre Test (15 Marks)

- 1) Write a function to calculate the total resistance (resistors in parallels) using Python's list as a parameter (no need to limit the maximum number of R) and use your function to calculate the total resistance in this circuit



- 2) Write the program to exchange the coins. Receive the amount of your exchanging money and return the number of coins in case of 10฿-coins, 5฿-coins, and 1฿-coins

Example:

Please enter the amount of exchanging money: 859

You received 10฿-coins: 85

You received 5฿-coins: 1

You received 1฿-coins: 4

- 3) Write a function to check the right triangle (has 1 angle = 90) by input parameters as the length of sides of triangle. Hint: In the right triangle, the length of sides are like this,  $a^2 + b^2 = c^2$

Example:

Enter the length of the triangle's sides:

a = 3

b = 4

c = 5

Your triangle is a right triangle.

Enter the length of the triangle's sides:

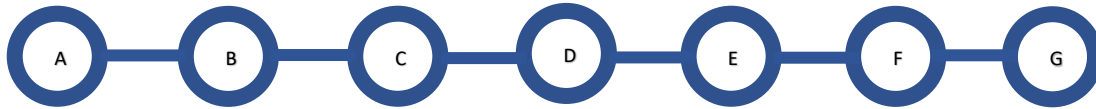
a = 3

b = 3

c = 3

Your triangle is not a right triangle.

- 4) Write a program to calculate the train ticket's price. User will enter the started station and the destination station. Your program will calculate the ticket's price. We have 7 stations as shown below:



Stations	Prices
1	25
2 ~ 3	37
4 ~ 5	45
6 ~ 7	60

Example:

Enter the started station: C  
Enter the destination station: G  
Prices for 4 stations is 45 Baht

- 5) Write a program to share the bill of a dinner. By everyone must pay and afford to pay the total price and still have a tip for the waiter. Program will be repeated until enter the cost of a dinner is 0

Example:

Enter the cost of a dinner: 1027 Baht  
Enter the number of people: 8  
Each person must pay: 129 Baht  
and tip for the waiter is: 5 Baht