

Exercise Sheet 01

1. Suppose a person rode a cab three times a day. Write a program to get his total cost and the average cost.
2. Using appropriate variables write a program to compute the area of a circle. You may try to enhance your program to compute:
 - both circumference and area
 - either circumference or area
3. Using appropriate variables and constants write a program to convert a temperature value from Fahrenheit to Celsius. You may also try to enhance your program to a two-way convertor
4. An employee works at the head office of a company in Colombo. The company has branches in Galle, Kandy, Matara, Katunayake and Ratnapura. There is an expressway entrance in Colombo from where, expressways run to all those cities. Distances from Colombo to those cities (in kms) are 110, 111, 150, 25, and 112 respectively. Write a computer program for the user to know the time it takes to go to a particular city from Colombo. (Note: You may ignore the traveling time outside expressways).
5. A rectangular living room has some number of doors and windows. A window has an area of 3 square meters and a door has an area of 1.5 square meters. A One-liter tin of paint, which costs Rs 650/= will cover 25 square meters of wall. You are required to know the total area available to paint as well as the total cost of paint. You have the measurements of the height, length and width of the room in meters as well as the number of doors and windows. Write a computer program to solve this problem.
6. Further to the above problem in Q5, suppose you as the contractor are supposed to issue a bill to the customer which contains the material cost, labor cost, the transport cost and the total cost. Write a computer program to display the bill on screen. You can input the labor cost and transport cost.

Note: A bill typically includes some additional data such as the contractors name and address, bill issued date, who created the bill, any discounts, etc.