Lab 7

1. Write a program to request user for value for radius. Use functions in the program to calculate the following based on the radius value entered by the user:
    a. The diameter of a circle
    b. The circumference of a circle
    c. The area of a circle

Sample input-output:

Enter value for radius (cm): 10

The diameter of the circle in cm is 20

The circumference of the circle in cm is 62.84

The area of the circle in cm is 314.2

2. A parking garage charges a minimum fee of RM3.00 to park for up to three hours. The garage charges an additional RM0.50 per hour for each hour or part thereof in excess of three hours. The charges beyond 20 hours are RM12.00. Assume that no car parks for longer than 24 hours at a time. Write a program that calculate and display parking charges for 5 customers who parked their cars in this garage yesterday. The program should use the function to determine the charge for each customer. At the end of the day, the total parking charges will be calculated and displayed.

Sample input-output:

No of hours – Car 1: 1.5

Parking charge : RM3.00

No of hours – Car 2: 4.0

Parking charge : RM3.50

No of hours – Car 3: 23

Parking charge : RM12.00

No of hours – Car 4: 24

Parking charge : RM12.00

No of hours – Car 5: 8

Parking charge : RM5.50

Total parking charges for the day: RM36.00

3. A detergent company pays its salesman on a commission basis. The salesman receive a salary of RM100 per week plus 15% of their gross sales for that week. For example, a salesman who sells RM5000 worth of detergent in a week receives RM100 plus 15% of RM5000, or a total of RM850. Write a program, using functions that will input each salesman's gross sales for a week to calculate and display that person's sales earnings.

Sample input-output:

Enter sales (-1 to end) : RM5000

Salary is RM850.00

Enter sales (-1 to end) : RM-1

4. Write a program to request to enter an integer value between 1 and 9999. Use a function to return the number with its digits reversed.

Sample input-output:

Enter a number between 1 and 9999: 9273
The number with its digits reversed is: 3729