Day 4

Lab Assignments

1. WAP to convert given time duration in second into its equivalent hour, minute and second.
   Input: Enter the time duration in seconds: 8860 second.
   Output: Entered time duration: 2 Hours, 27 Minutes and 40 Seconds
2. WAP to find the sum of first and last digits of a six-digit number. Number must be a user input.
   Input: Enter a six-digit number: 234459
   Output: Sum of the first and last digit: 11
3. WAP to find the sum of the digits of a three-digit number entered from the keyboard
   Input: Enter a three-digit number: 354
   Output: Sum of digits of 354 = 12
4. The marked price, discount and cost price are entered through keyboard. Sometimes seller gets profit or some time loss depends on discount. WAP to determine whether the seller has made profit or incurred loss. Also determine how much profit he made or loss incurred in percentage.
   Input 1: Enter the cost price: 80
   Enter the marked price: 100
   Enter the discount percentage: 25
   Output 1: Seller made a loss of 6.25 percentage.

   Input 2: Enter the cost price: 80
   Enter the marked price: 100
   Enter the discount percentage: 10
   Output 2: Seller made a profit of 12.50 percentage.
5. WAP to enter the principal, time and rate of interest, then calculate simple interest.
   Input:
   Enter the principal: 1000
   Enter the time in years: 5
   Enter the rate of interest in percentage: 5
   Output:
   Simple Interest: 250

Home Assignments

1. WAP to convert a distance in meter entered through keyboard into its equivalent kilometer and meter as per the following format.
   Input: Enter the distance in meter: 2430
   Output: Entered distance = 2 Kilometers and 430 meters
2. WAP to reverse a three digit number entered from the user.
   Input: Enter a number: 376.
   Output: Reverse of 376 = 673
3. WAP to add two times in hour, minute & second format entered through the keyboard in the format hh:mm:ss. Input must be taken in such a way that sum should not exceed 24 hours.
   Input: Enter the first time in hour, minute and second: 11 45 34
   Enter the second time in hour, minute and second: 09 28 41

Output: Sum of the two times = 21:14:15

4. WAP to enter the principal, time and rate of interest, then calculate compound interest.
   Input:
   Enter the principal: 1000
   Enter the time: 5
   Enter the rate of interest: 5
   Output:
   Compound Interest: 402.55
5. WAP to input the basic salary of an employee. From the basic calculate the DA (60% of basic), HRA(15% of basic) and Gross salary (Basic + DA + HRA).
   Input:
   Enter the basic salary: 10000
   Output:
   Basic: 10000
   DA: 6000
   HRA: 1500
   Gross Salary: 17500

Book Exercises

1. WAP to input an integer between 0 and 128 and print its ASCII character. [Page No: 67, Exercise 3.9]
   Input: Enter an integer between 0 and 128: 2
   Output: ASCII value of 0 = 50
2. WAP to input the distance travelled by a car and the fuel consumed. Next, compute the mileage of the car. [Page No: 67, Exercise 3.11]
   Input: Enter the distance travelled by the car (in km): 275
   Enter the fuel consumed (in liter): 23
   Output: Mileage of the car = 11.95 per liter
3. WAP to input an amount value and break it into the smallest possible indian currency notes. Possible Notes: 500, 100, 50, 20, 10, 5, 2, 1. [Page No: 67, Exercise 3.12]
   Input: Enter an amount value: 10387
   Output: Currency Notes:
   500 number of Note(s): 20
   100 number of Note(s): 3
   50 number of Note(s): 1
   20 number of Note(s): 1
   10 number of Note(s): 1
   5 number of Note(s): 1
   2 number of Note(s): 1
4. The straight-line method of computing the yearly depreciation of the value of an item is given by:

$$Depreciation = \frac{Purchase\ Price - Salvage\ Value}{Years\ of\ Service}$$

   WAP to determine the salvage value of an item when the purchase value, years of service, and the annual depreciation are given. [Page No: 97, Exercise 4.4]
   Input: Enter the purchase value, and years of service and annual depreciation: 50000 5 200
   Output: Salvage value of the given item = 49000