Some of the questions are from your course book exercise section are below for practice, you can find more at the end of each chapter.

Q1) Write a program that prompts the user to input the number of rupees and then prints how many paisa it becomes.

(Eg: user inputs 10 Rupees, you output 1000 paisa)

Q2) One metric ton is approximately 2,205 pounds. Write a program that prompts the user to input the amount of rice, in pounds, a bag can hold. The program outputs the number of bags needed to store one metric ton of rice.

Q3) Write a program that accepts as input the mass, in grams, and density, in grams per cubic centimeters, and outputs the volume of the object using the formula: volume 5 mass / density. Format your output to two decimal places.

Q4) Interest on a credit card’s unpaid balance is calculated using the average daily balance. Suppose that netBalance is the balance shown in the bill, payment is the payment made, d1 is the number of days in the billing cycle, and d2 is the number of days payment is made before billing cycle. Then, the average daily balance is:

averageDailyBalance 5 (netBalance \* d1 – payment \* d2) / d1

If the interest rate per month is, say, 0.0152, then the interest on the unpaid balance is:

interest = averageDailyBalance \* 0.0152

Write a program that accepts as input netBalance, payment, d1, d2, and interest rate per month. The program outputs the interest. Format your output to two decimal places.

Q5) Write a program that prompts the user to input three numbers. The program should then output the numbers in ascending order.

Q6) In a right triangle, the square of the length of one side is equal to the sum of the squares of the lengths of the other two sides. Write a program that prompts the user to enter the lengths of three sides of a triangle and then outputs a message indicating whether the triangle is a right triangle.

Q7) Write a program that prompts the user to input a positive integer. It should then output a message indicating whether the number is a prime number. (Note: An even number is prime if it is 2. An odd integer is prime if it is not divisible by any odd integer less than or equal to the square root of the number.)

Q8) Write a program that uses while loops to perform the following steps:

a. Prompt the user to input two integers: firstNum and secondNum (firstNum must be less than secondNum).

b. Output all odd numbers between firstNum and secondNum.

c. Output the sum of all even numbers between firstNum and secondNum.

d. Output the numbers and their squares between 1 and 10.

e. Output the sum of the square of the odd numbers between firstNum and secondNum.

f. Output all uppercase letters.

Q9) Rewrite the program in Q8 using for loop.

Q10) Rewrite the program in Q8 using do…while loop.

Q11) Rewrite the program in Q8 using sentinel controlled while loop.

Q12) Rewrite the program in Q8 using flag controlled while loop.

Q13) Rewrite the program in Q8 using break and continue in while loop.