**Practice Problem 1**

1. Write a program to print numbers from 1 to 10.
2. Write a program to calculate the sum of the first 10 natural numbers.
3. Two numbers are entered through the keyboard. Write a program to find the value of one number raised to the power of another.
4. A person wants to calculate the total amount of money they have saved in a year. Write a program that asks the user to input the amount of money they save each month, and then calculates the total amount of money saved in a year.
5. Write a program that calculates the average distance from the Sun of all the planets in the solar system. The program should ask the user to enter the distance from the Sun for each planet, and then use a loop to calculate the average distance.
6. Write a program that calculates the sum of the first n terms of the series 1 - 1/2 + 1/3 - ... + (-1)^n/n. The program should ask the user to enter the value of n, and then use a loop to calculate the sum.
7. Write a program that calculates the sum of the first n terms of the Fibonacci series (1, 1, 2, 3, 5, 8, ...). The program should ask the user to enter the value of n, and then use a loop to calculate the sum.
8. Write a program that calculates the sum of all the even numbers between 1 and a given number. For example, if the user inputs the number 10, the program should print out 30 (which is the sum of 2+4+6+8+10).
9. Write a program that calculates the sum of the squares of all the odd numbers between 1 and a given number. For example, if the user inputs the number 10, the program should print out 165 (which is the sum of 1+9+25+49+81).
10. Write a program that calculates the sum of all the numbers divisible by 3 between 1 and a given number. For example, if the user inputs the number 9, the program should print out 18 (which is the sum of 3+6+9).
11. A weather station wants to calculate the average temperature and humidity over a certain period (5 days). Write a program that asks the user to input the temperature and humidity readings for five days and calculate rates for the average temperature and humidity.
12. Write a program that asks the user to enter the name and diameter of each planet in the solar system and print them in the Command Prompt. The program should then use a loop to print out the name and diameter of each planet.
13. Write a program that calculates the total mass of the solar system. The program should ask the user to enter the mass of each planet, and then use a loop to calculate the total mass.
14. Write a program that calculates the average density of the planets in the solar system. The program should ask the user to enter the mass and diameter of each planet, and then use a loop to calculate the average density (mass divided by volume).
15. Write a program that keeps track of the number of copies of each comic book in a collection. The program should ask the user to enter the name and quantity of each comic book, and then use a loop to update the count for each comic book.
16. Write a program that calculates the sum of the first n terms of the series 1 + 2 + 3 + ... + n. The program should ask the user to enter the value of n, and then use a loop to calculate the sum.
17. Write a program that calculates the sum of the first n terms of the series 1 + 1/2 + 1/3 + ... + 1/n. The program should ask the user to enter the value of n, and then use a loop to calculate the sum.