Problem 1:

Input:

- Principle amount
- Interest rate

Processing:

- Use a loop to control the program execution.
- Compute annual interest (principle * rate).
- Compute ending balance (principle + interest).
- Display year, beginning balance, and ending balance for each of the 5 years.
- Display the accumulated interest for the 5 years.

Output:

- Display year, beginning balance, and ending balance for each year.
- Display the accumulated interest.

Problem 2:

Input:

- None (Fixed sequence calculation)

Processing:

- Use a for loop to compute the Fibonacci sequence.
- Start with 1, 1 and iterate to compute the next numbers.
- Display the first 20 numbers in the sequence.

Output:

- Display the first 20 numbers in the Fibonacci sequence.

Problem 3:

Input:

- Text file containing employee last name and salary

Processing:

- Read in employee last name and salary from the text file.
- Determine the bonus rate based on the provided chart.
- Compute the bonus using the bonus rate.
- Display the employee last name, salary, and bonus for each employee.
- Sum all bonuses paid out.

Output:

- Display the employee last name, salary, and bonus for each employee.
- Display the sum of all bonuses paid out.

Problem 4:

Input:

- Text file containing item, quantity, and price

Processing:

- Read through the text file one line at a time.
- Compute the extended price (quantity * price) for each line.
- Display the item, quantity, price, and extended price for each line.
- Sum all the extended prices.
- Count the number of orders.
- Compute the average order.

Output:

- Display the item, quantity, price, and extended price for each line.
- Display the sum of all the extended prices.
- Display the count of the number of orders.

- Display the average order.

Problem 5:

Input:

- Text file containing student last name, district code, and number of credits taken

Processing:

- Read through the text file one line at a time.
- Determine the tuition owed based on the district code and number of credits taken.
- Display the student last name, credits taken, and tuition owed for each line.
- Sum all the tuition owed.
- Count the number of students.

Output:

- Display the student last name, credits taken, and tuition owed for each line.
- Display the sum of all the tuition owed.
- Display the number of students.