

# IPO Tables for Assignment (Input | Process | Output)

## Problem 1 – Interest Calculation

Input	Process	Output
Principal amount, Interest rate	Loop through 5 years. Compute annual interest = beginning balance × rate. Compute ending balance = beginning balance + interest. Update principal = ending balance for next year. Accumulate total interest.	Year, Beginning Balance, Interest, Ending Balance (for 5 years). Total accumulated interest.

## Problem 2 – Fibonacci Sequence

Input	Process	Output
Number of terms (20)	Start with first two terms = 1, 1. Loop from 3rd term to 20th term. Each new term = sum of the previous two terms. Store or print each term.	First 20 Fibonacci numbers.

## Problem 3 – Employee Bonus

Input	Process	Output
Employee last name, Salary (from text file)	Read data line by line from the text file. Determine bonus rate based on salary chart. Compute bonus = salary × rate. Keep a running total of all bonuses.	Employee last name, Salary, Bonus (for each line). Total bonuses paid out.

## Problem 4 – Orders

Input	Process	Output
Item, Quantity, Price (from text file)	Read data line by line from the text file. Compute extended price = quantity × price. Accumulate sum of extended prices and count orders.	Item, Quantity, Price, Extended Price (for each line). Total of extended prices, Count of orders, Average order.

## Problem 5 – Student Tuition

Input	Process	Output
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<p>Student last name, District code (I or O), Credits taken (from text file)</p>	<p>Read data line by line from the text file.          If district code is I: cost per credit = 250.00. If O: cost per credit = 500.00.          Compute tuition = credits × cost per credit.          Accumulate total tuition and count students.</p>	<p>Student last name, Credits taken, Tuition owed (for each line).          Total tuition owed,          Number of students.</p>
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