

## M8P1

Input	Process	Output
Principle amount (float) Interest rate (float)	Loop through 5 years to calculate: Interest for each year, Ending balance, Update principle for the next year as the ending balance.	Beginning balance Ending balance Total interest earned over the 5 years.

## M8P2

Input	Process	Output
fixed sequence	Generate the Fibonacci sequence using a loop, Each number is the sum of the previous two numbers, starting from 0 and 1	Display the first 20 Fibonacci numbers.

## M8P3

Input	Process	Output
Employee last name (string) Employee salary (float)	Read employee data (last name and salary). For each employee Determine the bonus rate based on salary: 30% for salary $\geq$ 100,000 25% for salary between 50,000 and 99,999 15% for salary below 50,000 Calculate bonus and sum the total bonuses.	Display for each employee: Last name, Salary, Bonus Total bonuses paid out.

## M8P4

Input	Process	Output
Item name (string) Quantity (integer) Price per item (float)	For each item: Calculate the extended price: Sum the total extended prices. Count the number of items (orders).	For each item: Name, quantity, price, and extended price Total extended prices Number of orders

		Average order value.
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M8P5

Input	Process	Output
Student last name (string) District code (string: "I" or "O") Number of credits (integer)	For each student: If district code is "I", tuition is credits * 250 If district code is "O", tuition is credits * 500 Sum the total tuition owed.	For each student: Last name, Credits taken, Tuition owed Total tuition owed Number of students.