Q1

Input	Process	Output
Principal amount Interset rate	Set accumulated_interest = 0 Loop 5 times (years 1–5) interest = principal * rate Ending balance = principal + interest Accumulated interest += interest Display year, beginning balance, ending balance principal = ending balance	Year number Beginning balance (each year) Ending balance (each year) Total interest earned

Q2

Input	Process	Output
	Set first = 1 Set second = 1 Display first and second Loop 18 more times Next number = first + second Display next number first = second second = next number	First 20 fibonacci numbers

Q3

Input	Process	Output
Employee last name Employee salary (from file)	Open file Set total bonus = 0 Loop while reading file Determine bonus rate: Salary >=100000 20% Salary >= 50000 15% Otherwise 10% bonus = salary * rate Total bonus += bonus Display name, salary, bonus Close file Display total bonus	Employee last name Salary Bonus Total bonuses paid

Q4

Input	Process	Output
Item name quantity price (from file)	Open file Set total extended = 0 Set order count = 0 Loop while reading file Extended price = quantity * price total_extended += extended_price Order count += 1 Display item, quantity, price, extended_price Average order = total extended / order count Close file	Item Quantity Price Extended price Sum of extended prices Number of orders Average order

Q5

Input	Process	Output
Student last name (from file) District code Credits taken	Open file Set total tuition = 0 Set student count = 0 Loop while reading file If district code = I Cost per credit = 250 Else Cost per credit = 500 tuition = credits * cost per credit Total tuition += tuition Student count += 1 Display name, credits, tuition Close file	Student last name Credits taken Tuition owed Total tuition collected Number of students