Name: _____ **Student ID:** _____

ECON 0150 | MiniExam 2 | Version A

This MiniExam will take 16 minutes with a quick break to follow. MiniExams are designed to both test your knowledge and challenge you to apply familiar concepts in new environments. Treat it as if you're trying to show me that you understand the material. Answer clearly, completely, and concisely.

Academic Conduct Code

The following academic conduct code is designed to protect the integrity of your work. Print your name/initials beside the three academic honesty agreements. I pledge to my fellow students, the university, and the instructor, that:

____ I will complete this MiniExam solely using my own work.
____ I will not use any digital resources unless explicitly allowed by the instructor.
____ I will not communicate directly or indirectly with others during the MiniExam.

Q1. Calculate Grouping Results (see Table 1)

After grouping the subscription data by Plan_Type and calculating MAX Monthly_Revenue:

How many rows will the output have? _____

What will be the maximum monthly revenue for Premium?
[45] [65] [75] [85]

If we instead calculated the SUM, which plan type would have the LOWEST total?
[Basic] [Standard] [Premium]

Q2. Apply Filter and Aggregate (see Table 2)

Fill in the exact result of the following operations using the product inventory data:

1. Filter for Stock_Level <= 50
2. Group by Category
3. Calculate MEAN Price for each group (round to nearest dollar)

Category	Mean_Price
____	__
____	__

Q3. Identify Filtered Rows (see Table 3)

Given the airline flights data, which rows remain after applying:
Filter: (Delay_Minutes > 15) AND (Distance_Miles < 1000)

Circle the Flight_IDs that would remain in the filtered dataset:

[F001] [F002] [F003] [F004] [F005] [F006]

Q4. Construct a Filter Expression (no table needed)

Write out an expression using the following operations to find all students who either failed (Grade < 60) OR have perfect attendance (Absences == 0).

1. (Grade < 60)
2. (Absences == 0)
3. (Grade >= 60)
4. (Absences > 0) _____

Q5. Analyse a Filter (see Table 5)

The bank wants to identify problematic accounts that meet BOTH criteria:

1. Account is either overdrawn (Balance < 0) OR inactive (Last_Transaction > 90 days ago)
2. Account does NOT have premium status (Status != 'Premium')

How many accounts meet these criteria? _____

What is the LOWEST balance among the accounts that meet these criteria? _____

If we removed the Status requirement, how many accounts would be included? _____

Data Tables

Table 1: Subscription Revenue

User_ID	Plan_Type	Monthly_Revenue
U001	Basic	15
U002	Premium	65
U003	Standard	35
U004	Basic	15
U005	Premium	75
U006	Standard	35
U007	Basic	15
U008	Premium	85

Table 2: Product Inventory

Product_ID	Category	Price	Stock_Level
P001	Electronics	89	25
P002	Clothing	35	150
P003	Electronics	125	45
P004	Home	22	30
P005	Clothing	48	200
P006	Home	56	40

Table 3: Airline Flights

Flight_ID	Delay_Minutes	Distance_Miles
F001	5	450
F002	25	1200
F003	18	800
F004	0	350
F005	30	600
F006	12	1500

Table 5: Bank Accounts

Account_ID	Balance	Last_Transaction	Status
A001	1500	15	Standard
A002	-250	120	Basic
A003	5000	95	Premium
A004	-50	5	Standard
A005	200	180	Basic
A006	-100	30	Premium
A007	800	92	Standard
A008	3000	2	Premium