Nested If Assignment Problems. Do the IPO and code for each of the problems below.

1) The student will enter their last name and score. Determine their letter grade using the scale below. Display the student last name and letter grade.

Score	Letter Grade
90 & up	A
80 to 89	B
70 to 79	C
60 to 69	D
Below 60	F

input	process	output
Student last name, score	If score > 90 -> A Else if score > 80 -> B Else if score > 70 -> C Else if score > 60 ->D Else -> F	Student last name, letter grade

2) You are buying apples in bulk. Enter the quantity in pounds, determine the price per pound, then display the price per pound and total.

LBS	Price Per Pound
>100	.10
50-100	.25
Under 50	.50

input	process	output
Quantity in pounds	If >100 lbs -> $0.10/lb Else if 50–100 lbs ->$0.25/lb Else (<50 lbs) -> $0.50/lb Multiply quantity × price/lb = total	Price per pound, total

3) Enter the employee last name, hours worked and job code. Compute the pay based on the hourly rate per the job code. Display employee last name, hours worked, pay rate and total.

Job Code	Pay Rate

E 25.00

J 20.00

A 15.00

input	process	output
Last name, hours worked, job code	Job code E -> $25/hr Job code J -> $20/hr Job code A -> $15/hr Pay=hours x rate	Last name,hours,pay rate,total pay

4) Allow the user to enter the annual salary. Determine the tax rate from the table below. Compute the tax amount owed. Display salary, tax rate and tax amount.

Salary	Tax Rate
>100,000	40%
50,000 - 100,000	35%
Under 50,000	25%

input	process	output
Annual salary	If >100,000 -> 40% tax If 50,000–100,000 -> 35% tax If under 50,000 -> 25% tax Tax = salary × rate	Salary, tax rate, tax owed

5) You are running a metal recycling center and must pay people for metals they bring in. You give them a rate based on the weight in the table below. Allow the user to enter the weight. Determine the rate and then display the weight, rate and total given to the customer.

Weight	Rate Per Pound
>100	.50
30-100	.25
20- less 30	.20
Less 20	.10

input	process	output
Weight of metal	If >100 lbs -> $0.50/lb If 30–100 lbs -> $0.25/lb If 20–30 lbs -> $0.20/lb	Weight, rate, total

	If <20 lbs -> $0.10/lb Multiply weight × rate = total	