

Q1) The University of Guinness charges \$3000 per semester for in-state tuition and \$4500 per semester for out-of-state tuition. In addition, room and board is \$2500 per semester for in-state students and \$3500 per semester for out-of-state students.

Draw a flow chart and Write a C++ program that prompts the user for their residential status (i.e., in-state or out-of-state) and whether they require room and board (Y or N). The program should then compute and output their bill for that semester.

Use the sample output below:

Sample Run 1:

Please input "I" if you are in-state or "O" if you are out-of-state:

I

Please input "Y" if you require room and board and "N" if you do not:

N

Your total bill for this semester is \$3000

Sample Run 2:

Please input "I" if you are in-state or "O" if you are out-of-state:

O

Please input "Y" if you require room and board and "N" if you do not:

Y

Your total bill for this semester is \$8000

Q2) Draw a flow chart and Write a C++ program that will receive two integers from the user and store the numbers in locations called numerator and denominator. Calculate and output the result of the division if the denominator is not equal to zero otherwise output a message stating division by zero is an illegal operation.