

Method Problems 1

1. Modify an earlier program that will determine the cost of admission for a theatre. The price of admission is based on the age of the customer. Your program should prompt the user for their age and then display the correct admission amount.

- Children 6 and under = FREE (\$0.00)
- Students 7 to 17 = \$9.80
- Adults 18 to 54 = \$11.35
- Seniors 55+ = \$10.00

Your program should make use of a method `GetTicketPrice(int age)` that will return the price of the ticket based on the passed in age. It should also use a method `DisplayMenu()` that will display the menu of options to the user.

2. Modify an earlier program that will prompt the user for a student's name and their mark. The program should display the student's name along with a letter grade calculated using the following table:

Mark	Letter Grade
100 - 90	A
89 - 80	B
79 - 70	C
69 - 60	D
59 - 50	E
49 - 0	F

Your program should make use of a method `LetterGradeFromMark(int mark)` that will return the corresponding letter grade based on the passed in mark.

3. Modify an earlier program that will compute the income tax due on a taxable income entered by the user. Use the following table to determine the tax owed:

Taxable Income	Tax Due
Up to \$50,000	\$0 + 5% of amount over \$0
Up to \$100,000	\$2,500 + 7% of amount over \$50,000
\$100,000 and over	\$6,000 + 9% of amount over \$100,000

Your program should make use of a method `TaxesOwed(double income)` that will return the taxes owed based on the passed in income.