

COSC1336 “Programming Fundamentals I”

Flowchart 2 Lab

Draw flowchart AND write pseudo code for each of the following problems.

1. User asks you to design a program that calculates the price of an item including sales tax. The program should print the total.
2. The furniture store asks you to write a program that will print a payment sheet for customers. The special they offer allows the customer to pay the total amount of the furniture in twelve equal payments with no interest.
3. A large pizza is composed of eight slices. Create a program that will print out the amount of slices each person may have.
4. You decide to write a program that figures how many gallons of gas you will need to take a road trip. The printout should contain the total amount of miles for the trip, the miles per gallon for your vehicle, and the total gallons needed for the trip.
5. You design another program for your trip. You use the total amount of gallons found in a previous program along with the current price of gas per gallon to print the total amount of money you expect to spend on gas for the trip.
6. You want an estimate of how many hours of driving the trip will require. Use the total amount of miles above and print how long the drive would be at sixty-five miles per hour. The program should print the total miles for the trip, the average speed, and the total hours of drive time.
7. The automotive shop asks you to create a program that prints the mileage and date for oil changes. The recommended mileage and time between oil changes is every three months or three thousand miles. The auto tech wants to type in the date and current mileage at time of oil change and print out a sticker with the mileage and date for the next oil change.
8. The retail store wants a program that will print out the profit for the day. They will enter how much money in the drawer at the end of each day along with the total amount spent for business costs. The difference is the profit.