

COSC1336 “Programing Fundamentals I”

Flowchart Lab

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

1. User asks you to develop a program that calculates and then prints interest earned on a bank balance. Program should print interest earned for the same balance when interest is accumulated annually, semiannually and quarterly.

Interest earned yearly=balance * rate /100	for annual
Interest earned semiannually =balance*rate/2/100	for semi annual
Interest earned quarterly= balance*rate/4/100	for quarterly

2. Ohm’s law state that volts (V) is Current (I) times resistance (R)
 $V=I*R$

Calculate volts given the current and resistance for a circuit.

3. Boeing 747 uses fuel at the rate of 4,776 gallons per hour at cruising speed and 2600 gallons for takeoff and 1500 gallons for landing. Calculate the fuel needed for a trip. User will input the trip length in hours.
4. User asks you to develop a program to calculate and print weekly payroll. Calculations must take into account the following: User input ?
 - a. Income tax rate is rate is 15% (.15*salary)
 - b. Social Security tax is 7.65% (.0765*salary)
 - c. Display salary, income tax, social security tax, and net pay
 $\text{net pay}=\text{salary}-\text{income tax} - \text{social security tax}$