More Selection Control Structures

#1

Program to compute different sales taxes due, total amount due and print customer name, purchase amount, sales tax and total amount due.

**Input**  **Processing**  **Output**

|  |  |  |
| --- | --- | --- |
| Customer name, purchase amount, tax code | Compute sales tax by multiplying appropriate tax percentage by purchase amount based on the tax code.  Also calculate totalamountdue=purchase\_amount + sales tax | Print customer name, purchase amount sales tax and total amount due |
|  |  |  |
|  |  |  |
|  |  |  |

Control Structure:

1. Initialize Custname, total\_amount\_due, sales\_tax & purch\_amt
2. Get input Custname, purch\_amt & tax\_code
3. Case of tax\_code
   1. Value=0 : sales\_tax=0\*purch\_amout
   2. Value=1: sales\_tax=.03\*purch\_amout
   3. Value=2: sales\_tax=.05\*purch\_amout
   4. Value=3: sales\_tax=.07\*purch\_amout

Endcase

1. Total\_amount\_due = sales\_tax+purch\_amount
2. Print custname, purchase amount, sales\_tax, Total\_amount\_due

Test

Sales tax Purchase Amount Total Amount due

0 100 100

.03 100 103

..05 100 105

.07 100 107

#2 Calculate employee's pay

Compute the employee’s weekly pay and then print it and the input data (emp#, pay rate & numb of hours)

Validate the pay rate field and the hours worked field and, if valid, compute the employee’s weekly pay and then print it and the input data.

**Input**  **Processing**  **Output**

|  |  |  |
| --- | --- | --- |
| Emp\_No, Pay\_Rate, Hours\_Worked | If Hours\_Worked is < or equal to 60 and Pay\_Rate is < or equal to 25 Calculate weekly pay  Else  Print” Pay Rate and Hours are invalid |  |
|  | Calculate weeklypay  If Hours\_Worked>35  Than  Ot\_Hrs=Hours\_Worked-35  OT\_Pay=Ot\_Hrs\*Rate\*1.5  Weekly\_Pay= (35\*Pay\_Rate) +OT\_Pay  Else  If Hourse\_Worked equal to 35 or less than 35  Weekly\_Pay=(Hourse\_Worked) \* 35 | Print customer name, purchase amount sales tax and total amount due |

Control Structure:

1. Initialize Emp\_No,Pay\_Rate,Hours\_Worked, Ot\_Hrs, OT\_Pay, Reg\_Hrs, Weekly\_Pay
2. Get input Emp\_No, Pay\_Rate & Hours\_Worked
3. Check for out of range for PayRate and Hour worked. If out of range, display message “pay rate and hours worked are out of range
4. Calculate Weekly Pay..

If Hours\_Worked>35

Than

Ot\_Hrs=Hours\_Worked-35

OT\_Pay=Ot\_Hrs\*Rate\*1.5

Weekly\_Pay= (35\*Pay\_Rate) +OT\_Pay

Else

If Hourse\_Worked equal to 35 or less than 35

Weekly\_Pay=(Hourse\_Worked) \* 35

1. Print customer name, purchase amount sales tax and total amount due

Variables

Emp\_No,Pay\_Rate,Hours\_Worked, Ot\_Hrs, OT\_Pay, Reg\_Hrs, Weekly\_Pay