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CSC-117-02 Java Programming  
Due Date: 4/21/2021  
What does the program do: This program demonstrates using array operations and files to calculate the payroll of employees

Payroll Design (Arrays):

1. Start
2. Initialize variables
   1. Employees SIZE
   2. Total Gross
   3. Gross Average
   4. State Tax Percentage
   5. Federal Tax Percentage
   6. Counter
   7. File Name
3. Create input scanner
4. Create arrays
   1. First Name
   2. Middle Initial
   3. Last Name
   4. ID Number
   5. Hours Worked
   6. Rate per Hour
   7. Gross
   8. State Tax
   9. Federal Tax
   10. Net
5. For (int k = 0; k < employees; k++)
   1. Display “Enter first name”
      1. Set first name
   2. Display “enter middle initial”
      1. Set middle initial
   3. Display “enter last name”
      1. Set last name
   4. Display “enter hours worked”
      1. Set hours worked
   5. Display “enter rate per hour”
      1. Set rate per hour
   6. If (hours worked >= 0 OR hours worked <= 40)
      1. Gross = hours worked \* rate per hour
   7. Else if (hours worked > 40 AND hours worked < 65)
      1. Gross = 40 \* rate per hour + (hours worked - 40) \* (rate per hour \* 1.5)
   8. State Tax = Gross \* state tax percentage
   9. Federal Tax = Gross \* Federal tax percentage
   10. Net = Gross - (State Tax + Federal Tax)
   11. Total gross+= gross
6. Average = total gross/employees
7. For (counter = 3; counter >= 0; counter--)
   1. Display “choose your output option from the list:”
   2. Display “Enter 1 to send output to the screen”
   3. Display “Enter 2 to send output to an output file”
   4. Display “Enter 3 to send output to screen and output file”
   5. Set number
   6. Switch statement
      1. Case 1: display “you chose 1: send output to the screen”

Display “Last Name:, First Name:, ID:, Middle Initial:, Rate per

Hour:, hours worked:, state tax:, federal tax:, gross:, net:”

For(int i = 0; i < employees; i++)

Display “Last Name, First Name, ID, Middle Initial, Rate per

hour, hours worked, state tax, federal tax, gross,

net”

display “total gross”

display “average gross”

break

* + 1. Case 2: display “you chose 2: send output to a file”

Display “enter file name: ”

Set file name

Open the file

For (int i = 1; i <= Employees; i++)

Write first name, middle initial, last name, ID, rate per

hour, hours worked, state tax , federal tax, gross, net, total gross, gross average to file

Close the file

break

* + 1. Case 3: display “you chose 3: send output to the screen and file”

Display “Last Name:, First Name:, ID:, Middle Initial:, Rate per

Hour:, hours worked:, state tax:, federal tax:, gross:, net:”

For(int i = 0; i < employees; i++)

Display “Last Name, First Name, ID, Middle Initial, Rate per

hour, hours worked, state tax, federal tax, gross,

net”

display “total gross”

display “average gross”

Display “enter file name: ”

Set file name

Open the file

For (int i = 1; i <= Employees; i++)

Write first name, middle initial, last name, ID, rate per

hour, hours worked, state tax , federal tax, gross, net, total gross, gross average to file

Close the file

break

* + 1. Default: display “invalid choice”

1. End