

Projects

13. Write a program to compute an employee's weekly pay and produce a pay slip showing name, gross pay, deductions, and net pay. The program should first prompt the user for:
 - a. family name
 - b. given name
 - c. hourly rate of pay
 - d. number of hours worked that week (Any hours over 40 are paid at double the normal hourly rate.)
 - e. a letter indicating the employee's tax category
 - A. no tax deduction
 - B. tax is 10% of gross pay
 - C. tax is 20% of gross pay
 - D. tax is 29% of gross pay
 - E. tax is 35% of gross pay
 - f. either a Y or an N to indicate whether or not the employee wants \$20 deducted from the weekly pay as a contribution to the United Way Charity
14. Write a program that makes change for amounts less than one dollar. Input to the program should be a positive integer less than 100, representing an amount of money, in cents. Output should be the original amount of money together with a set of coins (quarters, dimes, nickels, cents) that could make up that amount. The program should produce change containing the minimum number of coins required for the given amount. The output should be in a natural, non-stilted form. For example, input of 58 should produce output something like

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58 cents: 2 quarters, 1 nickel, and 3 cents.
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rather than

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58 cents: 2 quarters, 0 dimes, 1 nickels, 3 cents.
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15. The government of Simpleton has devised what it thinks is an easy income tax system, but its citizens still need help. They have commissioned you to write a program to ask a citizen a few simple questions and compute the tax that is payable or the refund that is due. You must write your program as clearly as possible so that the government can verify it easily. Your program should first ask a citizen for his/her income (`income`), housing cost (`houseCost`), number of children (`totalChildren`), and number of children that are in school (`schoolChildren`). It should then compute and print the tax payable or the refund due. The tax rules are as follows. The Simpleton tax rate is 18% but citizens are not taxed on the first \$10 000 of income unless they pay more than \$8 000 for housing. For every child, a Simpleton citizen gets a \$500 tax reduction, or \$1 000 if the child is in school. This reduction never results in citizens getting refunds unless their housing costs are less than \$6 000 and they have more than two children, at least one of whom is in school. Finally, if the tax payable is more than \$2 000, then it is increased by an additional 15% surtax.