Edgardo Richard Ventura (Eddie)

Teacher’s Name

Course Title and Number

2/24/2024

Title

1. The student will enter their last name and score. Determine their letter grade using the scale below. Display the student’s last name and letter grade.

Score Letter Grade

90 & up A

80 to 89 B

70 to 79 C

60 to 69 D

Below 60 F

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Input | Process | Output |  | Name | Etymology |
|  | if (score >= 90 and score <= 100)  lg = 'A';  else if (score >= 80 and score < 90)  lg = 'B';  else if (score >= 70 and score < 80)  lg = 'C';  else if (score >= 60 and score < 70)  lg = 'D';  else  lg = 'F'; |  |  | ln | Last Name |
| ln | ln |  | score | Score |
| score | lg |  | lg | Letter Grade |
|  |  |  |  |  |

1. You are buying apples in bulk. Enter the quantity in pounds, determine the price per pound, then display the price per pound and total.

LBS Price Per Pound

>100 .10

50-100 .25

Under 50 .50

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Input | Process | Output |  | Name | Etymology |
|  | if (lbs > 100)  ppp = 0.10;  else if (lbs >= 50)  ppp = 0.25;  else  ppp = 0.50; |  |  | lbs | pounds |
| lbs | ppp |  | ppp | Price per pound |
|  | tp |  | tp | Total price |
|  | tp = lbs \* ppp; |  |  |  |  |

1. Enter the employee last name, hours worked and job code. Compute the pay based on the hourly rate per the job code. Display employee last name, hours worked, pay rate and total.

Job Code Pay Rate

E 25.00

J 20.00

A 15.00

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Input | Process | Output |  | Name | Etymology |
|  | if (jc == 'E' or jc == 'e')  pr = 25.00;  else if (jc == 'J' or jc == 'j')  pr = 20.00;  else if (jc == 'A' or jc == 'a')  pr = 15.00;  else {  cout << "Invalid job code entered." << endl;  return 1;  } | ln |  | ln | Last name |
| ln | hours |  | hours | Hours worked |
| hours | pr |  | jc | Job code |
| jc | total = hours \* pr; | total |  | pr | Pay rate |
|  |  |  |  | total | Total pay |

1. Allow the user to enter the annual salary. Determine the tax rate from the table below. Compute the tax amount owed. Display salary, tax rate and tax amount.

Salary Tax Rate

>100,000 40%

50,000 - 100,000 35%

Under 50,000 25%

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Input | Process | Output |  | Name | Etymology |
|  | if (salary > 100000)  tr = 40.0;  else if (salary >= 50000 and salary <= 100000)  tr = 35.0;  else  tr = 25.0; |  |  | salary | Salary |
| salary | salary |  | tr | Tax rate |
|  | tr |  | ta | Tax amount owed |
|  | ta = (tr / 100) \* salary; | ta |  |  |  |

1. You are running a metal recycling center and must pay people for metals they bring in. You give them a rate based on the weight in the table below. Allow the user to enter the weight. Determine the rate and then display the weight, rate and total given to the customer.

Weight Rate Per Pound

>100 .50

30-100 .25

20- less 30 .20

Less 20 .10

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Input | Process | Output |  | Name | Etymology |
|  | if (lbs > 100)  rpp = 0.50;  else if (lbs >= 30 and lbs <= 100)  rpp = 0.25;  else if (lbs >= 20 and lbs < 30)  rpp = 0.20;  else  rpp = 0.10; |  |  | lbs | Weight in pounds |
| lbs | lbs |  | rpp | Rate of pay per pounds |
|  | rpp |  | total | Total payout |
|  | total = lbs \* rpp; | total |  |  |  |