Program 5

The purpose of this program is to print a monthly sales chart for the Child-Growth Encyclopedia Company.

Data Dictionary 5

|  |  |  |
| --- | --- | --- |
| Variable Name | Data Type | Location |
| State1 | String | Book3 |
| Basic1 | int | Book3 |
| Child1 | int | Book3 |
| Update1 | int | Book3 |
| State2 | String | Book3 |
| Basic2 | int | Book3 |
| Child2 | int | Book3 |
| Update2 | int | Book3 |
| TotalUnitSold | int | Book3 |
| TotalUnitSold2 | int | Book3 |
| TotalUnitSold3 | int | Book3 |
| PriceUnit | double | Book3 |
| PriceUnit2 | double | Book3 |
| PriceUnit3 | double | Book3 |
| CommissionPaid | double | Book3 |
| CommissionPaid2 | double | Book3 |
| CommissionPaid3 | double | Book3 |
| GrossSales | double | Book3 |
| GrossSales2 | double | Book3 |
| GrossSales3 | double | Book3 |
| CommissionRate | double | Book3 |
| CommissionRate2 | double | Book3 |
| CommissionRate3 | double | Book3 |

Flowchart 5

State1 PriceUnit = 325.00  
Basic1 = 150 PriceUnit2 = 127.50  
Child1 = 120 PriceUnit3 = 18.95  
Update1 = 105 TotalUnitSold  
State2 TotalUnitSold2  
Basic2 = 225 TotalUnitSold3   
Child2 = 200 CommissionRate = 0.22  
Update2 = 150 CommissionRate2 = 0.15

CommissionRate3 = 0.20

TotalUnitSold = Basic1 + Basic2

GrossSales = TotalUnitSold \* PriceUnit

CommissionPaid = GrossSales \* CommissionRate

TotalUnitSold2 = Child1 + Child2  
GrossSales2 = TotalUnitSold2 \* PriceUnit2  
 CommissionPaid2 = GrossSales2 \* CommissionRate2  
   
TotalUnitSold3 = Update1 + Update2  
GrossSales3 = TotalUnitSold3 \* PriceUnit3  
 CommissionPaid3 = GrossSales3 \* CommissionRate3

Display

State1,State2,Basic1,Basic2, Child1, Child2, Update1, Update2, TotalUnitSold, TotalUnitSold2, TotalUnitSold3, PriceUnit, PriceUnit2, PriceUnit3, GrossSales, GrossSales2, GrossSales3, CommissionRate,CommissionRate2,CommissionRate3,CommissionPaid,CommissionPaid2, CommissionPaid

Program 6

The purpose of this program is to assign letter grades (A, B, C, D, F) to students calculate the average, min and max grades. Also, read from a data file.

Data Dictionary 6

|  |  |  |
| --- | --- | --- |
| Variable Name | Data Type | Location |
| SSN | String | Book4 |
| LN | String | Book4 |
| FN | String | Book4 |
| letter | char | Book4 |
| count | int | Book4 |
| min | int | Book4 |
| max | int | Book4 |
| Avg | int | Book4 |
| G1 | int | Book4 |
| G2 | int | Book4 |
| G3 | int | Book4 |
| G4 | int | Book4 |
| G5 | int | Book4 |
| A | int | Book4 |
| B | int | Book4 |
| C | int | Book4 |
| D | int | Book4 |
| F | int | Book4 |

Program 7

The purpose of this program is to calculate the overtime pay of the Payroll Company and display all employees from reading from a data file.

Data Dictionary 7

|  |  |  |
| --- | --- | --- |
| Variable Name | Data Type | Location |
| SSN | String | Book5 |
| LN | String | Book5 |
| FN | String | Book5 |
| Hours | double | Book5 |
| Pay\_rate | double | Book5 |
| Gross\_pay | double | Book5 |
| Fed | double | Book5 |
| State | double | Book5 |
| Hosp | double | Book5 |
| Union | double | Book5 |
| Ded | double | Book5 |
| Net\_pay | double | Book5 |
| overtime | double | Book5 |

Program 8

The purpose of this program is to calculate the overtime pay of the Payroll Company and display a individual employees from reading from a data file.

Data Dictionary 8

|  |  |  |
| --- | --- | --- |
| Variable Name | Data Type | Location |
| SSN1 | String | Book6 |
| SSN0 | String | Book6 |
| LN | String | Book6 |
| FN | String | Book6 |
| Hours | double | Book6 |
| Pay\_rate | double | Book6 |
| Gross\_pay | double | Book6 |
| Fed | double | Book6 |
| State | double | Book6 |
| Hosp | double | Book6 |
| Union | double | Book6 |
| Ded | double | Book6 |
| Net\_pay | double | Book6 |
| overtime | double | Book6 |

Program 9

The purpose of this program is to calculate monthly payment, print information, and print Amortization table.

Data Dictionary 9

|  |  |  |
| --- | --- | --- |
| Variable Name | Data Type | Location |
| NY | int | Book7 |
| NM | int | Book7 |
| IY | double | Book7 |
| IM | double | Book7 |
| PR | double | Book7 |
| P | double | Book7 |
| Q | double | Book7 |
| MP | double | Book7 |

Program 10

The purpose of this program is to design and implement a Roman Numeral Calculator.

Flowchart 10