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/*
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version: Ass_part2_v6
Program: Overtime salary calculator
*/

#include <cstdlib>
#include <iostream>

using namespace std;

int main(int argc, char *argv[])
{
    //variable decorator
    int weekWork = 0;
    int weekend = 0;
    int overtime = 0;
    int i;
    int weekWorkOut = 0;
    int weekTotal = 0;
    int totalOvertime = 0;
    int totalSalary = 0;
    int totalMonth = 0;
    int repeat;
    const int MAX = 7;
    const int MIN = 2;
    int j = 2;

    repeat = rand()%(MAX-MIN+1)+2; //random number

    while(j++ < repeat)
    {
        for(i=1;i<=4;i++)
        {
            cout << "Week" << i << endl;//show which week

            //start loop input
            while(1)
            {

                //input weekWork
                cout << "Total hours worked Mon-Fri? ";
                cin >> weekWork;

                //input weekend
                cout << "Hours worked overtime on weekend? ";
                cin >> weekend;

                //input condition & loop break
                if(weekWork <= 46 && weekend <= 16)
                {
                    break; //while loop stop
                }
                else
                {
                    weekWork = 0;//set to 0 if condition is wrong(
important for total month)
                    weekend = 0;//set to 0 if condition is wrong(
important foe total salary)

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        cout << "Incorrect entry: weekday OT hours must be
less than 10, weekend OT must be less than 16" << endl;
        cout << "Please re-enter" << endl;
    } //end if
} //end loop

//weekwork condition fix
if(weekWork <= 35)
{
    weekWorkOut = weekWork;
}
else if( weekWork >= 36)
{
    weekWorkOut = 36;
} //end if

//headache start
//total hours overtime in week
overtime = weekWork - weekWorkOut;
totalOvertime = weekWork - weekWorkOut + weekend;
cout << "Overtime hours worked this week: " << totalOvertime
<< endl; //output overtime

//total salary in week
weekTotal = weekWorkOut * 20 + overtime * 1.5 * 20 + weekend
* 2 * 20;
cout << "Weekly salary: " << weekTotal << endl; // output week
salary
cout << " " << endl;

//loop back counter
totalOvertime = totalOvertime + totalMonth;
totalMonth = totalOvertime;

weekTotal = weekTotal + totalSalary;
totalSalary = weekTotal;
//end headache!!

//total hours & total salary
if(i==4)
{
    cout << "Overtime worked this month: " << totalMonth << "
hours" << endl; //output overtime in a month
    cout << "Salary this month is $" << totalSalary <<
endl; //output total salary in month
    cout << "Program ended with exit code: 0" << endl;
} //end if
}
weekTotal = 0;
totalSalary = 0;
cout << " " << endl;
} //end loop

system("PAUSE");
return EXIT_SUCCESS;
}

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