

CSC 126

Individual Assignment (Stage 3)

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CODING

```
#include <iostream>
#include <cctype>
#include <iomanip>
using namespace std;

/*The purpose of this program: To get the Employee's data and find the Employee's net pay
Assignment 3
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//Function to get all input data from user
void inputData (int&id, string&name, double&hours){
    cout<<"Employee ID = ";
    cin>>id;
    cout<<"Employee First Name = ";
    cin>>name;
    cout<<"Hours worked per week (hours) = ";
    cin>>hours;
}

//Function to calculate gross Pay
double calcGross(double hours){
    double gross;

    if (hours<=40)
        gross=hours*8.0;

    else if (hours<=50)
        gross=(hours-40)*12+320; //320 = 40 * 8 >> 12 = 8*1.5

    else
        gross=(hours-50)*16+440; //440 = 320 + (10 * 12) >> 16 = 8*2

    return gross;
}

//Function to calculate deduction
double calcDeduc(double gross){
    double deduc;

    deduc =(gross*0.19)+10; //0.19 = 0.08(income tax) + 0.11(KWSP) >> 10(the employee's union)

    return deduc;
}

//Function to calculate net pay
double calcNet(double gross, double deduc){
    double net;

    net=gross-deduc;

    return net;
}
```

```

//Function to find highest net
double highNet(double net, double&high){

    if (net>high)
        high=net;

    return high;
}

//Function to find highest name
void highnetname(double net, double&high, string name, string&hname){

    if (net>high)
        hname=name;
}

//Main function
int main (){
    int id, n=0, u1200=0;
    string name, hname;
    double hours, gross, deduc, net, month, high=-999999999;
    char confirm='y';

    cout<<"Fill the data of the employees below : "<<endl;

    //Loop to find the employees data and net pay
    while(tolower(confirm)!='n'){

        //display the number of employee
        cout<<"\n\t\t\t\t\t\t\tEmployee " <<n+1<<endl<<endl;

        //Function to get all input data from user caller
        inputData (id, name, hours);

        //Function to calculate gross Pay caller
        gross=calcGross(hours);
        cout<<"Gross Pay = RM ";
        cout<<fixed<<setprecision(2)<<gross<<endl; //Fix the decimal point to 2d.p.

        //Function to calculate deduction caller
        deduc=calcDeduc(gross);
        cout<<"Deduction = RM ";
        cout<<fixed<<setprecision(2)<<deduc<<endl; //Fix the decimal point to 2d.p.

        //Function to calculate net pay caller
        net=calcNet(gross,deduc);
        cout<<"The Net Pay = RM ";
        cout<<fixed<<setprecision(2)<<net<<endl; //Fix the decimal point to 2d.p.

        //Function to find the highest among the employees caller
        highnetname(net, high, name, hname);
        high=highNet(net,high);
    }
}

```

```

//Calculation and process to find the total employees is under paid which RM1200 per month
month=net*4;
if (month<1200)
    u1200++;

//updating
n++;
cout<<"Do you want to continue (y/n) : ";
cin>>confirm;

}

//OUTPUT statement
cout<<"\n\nTHE TOTAL OF EMPLOYEES : "<<n<<endl;
cout<<"THE HIGHEST PAID :- "<<endl;
cout<<"\t\t\t\t\t"<<hname<<endl;
cout<<"\t\t\t\t\t      (RM "<<high<<)"<<endl;
cout<<"THE TOTAL OF EMPLOYEES THAT PAID BELOW RM 1200 per month : "<<u1200<<endl;

cout<<"\n\t-THANK YOU-"<<endl;

return 0;
}

```

TESTING

1) ALL EMPLOYEE'S NETPAY ABOVE RM 1200

```
C:\Users\Lenovo\Documents\UTTM\CSC126\ass 3\Assignment_3.exe
Fill the data of the employees below :

Employee 1
Employee ID = 101010
Employee First Name = Danial
Hours worked per week (hours) = 59
Gross Pay = RM 584.00
Deduction = RM 120.96
The Net Pay = RM 463.04
Do you want to continue (y/n) : y

Employee 2
Employee ID = 202020
Employee First Name = Farhan
Hours worked per week (hours) = 57
Gross Pay = RM 552.00
Deduction = RM 114.88
The Net Pay = RM 437.12
Do you want to continue (y/n) : y

Employee 3
Employee ID = 303030
Employee First Name = Haikal
Hours worked per week (hours) = 61
Gross Pay = RM 616.00
Deduction = RM 127.04
The Net Pay = RM 488.96
Do you want to continue (y/n) : n

THE TOTAL OF EMPLOYEES : 3
THE HIGHEST PAID :-
Haikal
(RM 488.96)
THE TOTAL OF EMPLOYEES THAT PAID BELOW RM 1200 per month : 0

-THANK YOU-

-----
Process exited after 60.11 seconds with return value 0
Press any key to continue . . .
```

2) ALL EMPLOYEE'S NETPAY BELOW RM 1200

```
C:\Users\Lenovo\Documents\UTTM\CSC126\ass 3\Assignment_3.exe
Fill the data of the employees below :

Employee 1
Employee ID = 404040
Employee First Name = Raziq
Hours worked per week (hours) = 40
Gross Pay = RM 320.00
Deduction = RM 70.80
The Net Pay = RM 249.20
Do you want to continue (y/n) : y

Employee 2
Employee ID = 505050
Employee First Name = Peah
Hours worked per week (hours) = 35
Gross Pay = RM 280.00
Deduction = RM 63.20
The Net Pay = RM 216.80
Do you want to continue (y/n) : y

Employee 3
Employee ID = 606060
Employee First Name = Kasih
Hours worked per week (hours) = 42
Gross Pay = RM 344.00
Deduction = RM 75.36
The Net Pay = RM 268.64
Do you want to continue (y/n) : n

THE TOTAL OF EMPLOYEES : 3
THE HIGHEST PAID :-
Kasih
(RM 268.64)
THE TOTAL OF EMPLOYEES THAT PAID BELOW RM 1200 per month : 3

-THANK YOU-

-----
Process exited after 67.9 seconds with return value 0
Press any key to continue . . .
```

3) 2 EMPLOYEE'S NETPAY BELOW RM 1200

```
C:\Users\Lenovo\Documents\UITM\CSC126\ass 3\Assignment_3.exe
Fill the data of the employees below :

Employee 1
Employee ID = 707070
Employee First Name = Zack
Hours worked per week (hours) = 59
Gross Pay = RM 584.00
Deduction = RM 120.96
The Net Pay = RM 463.04
Do you want to continue (y/n) : y

Employee 2
Employee ID = 808080
Employee First Name = Juwita
Hours worked per week (hours) = 45
Gross Pay = RM 380.00
Deduction = RM 82.20
The Net Pay = RM 297.80
Do you want to continue (y/n) : y

Employee 3
Employee ID = 909090
Employee First Name = Lopez
Hours worked per week (hours) = 39
Gross Pay = RM 312.00
Deduction = RM 69.28
The Net Pay = RM 242.72
Do you want to continue (y/n) : n

THE TOTAL OF EMPLOYEES : 3
THE HIGHEST PAID :-
                                Zack
                                (RM 463.04)
THE TOTAL OF EMPLOYEES THAT PAID BELOW RM 1200 per month : 2

-THANK YOU-

-----
Process exited after 5505 seconds with return value 0
Press any key to continue . . .
```

4) 1 EMPLOYEE'S NETPAY BELOW RM 1200

```
C:\Users\Lenovo\Documents\UITM\CSC126\ass 3\Assignment_3.exe
Fill the data of the employees below :

Employee 1
Employee ID = 100100100
Employee First Name = Fikri
Hours worked per week (hours) = 61
Gross Pay = RM 616.00
Deduction = RM 127.04
The Net Pay = RM 488.96
Do you want to continue (y/n) : y

Employee 2
Employee ID = 200200200
Employee First Name = Raziq
Hours worked per week (hours) = 50
Gross Pay = RM 440.00
Deduction = RM 93.60
The Net Pay = RM 346.40
Do you want to continue (y/n) : y

Employee 3
Employee ID = 300300300
Employee First Name = Haslinda
Hours worked per week (hours) = 40
Gross Pay = RM 320.00
Deduction = RM 70.80
The Net Pay = RM 249.20
Do you want to continue (y/n) : n

THE TOTAL OF EMPLOYEES : 3
THE HIGHEST PAID :-
                                Fikri
                                (RM 488.96)
THE TOTAL OF EMPLOYEES THAT PAID BELOW RM 1200 per month : 1

-THANK YOU-

-----
Process exited after 163.6 seconds with return value 0
Press any key to continue . . .
```

5) ALL UPDATING PART USER ENTER IN CAPITAL LETTERS

```
C:\Users\Lenovo\Documents\UiTM\CSC126\ass 3\Assignment_3.exe
Fill the data of the employees below :

Employee 1
Employee ID = 400400400
Employee First Name = Wati
Hours worked per week (hours) = 59
Gross Pay = RM 584.00
Deduction = RM 120.96
The Net Pay = RM 463.04
Do you want to continue (y/n) : Y

Employee 2
Employee ID = 500500500
Employee First Name = Tipah
Hours worked per week (hours) = 49
Gross Pay = RM 428.00
Deduction = RM 91.32
The Net Pay = RM 336.68
Do you want to continue (y/n) : Y

Employee 3
Employee ID = 600600
Employee First Name = Yatiz
Hours worked per week (hours) = 42
Gross Pay = RM 344.00
Deduction = RM 75.36
The Net Pay = RM 268.64
Do you want to continue (y/n) : N

THE TOTAL OF EMPLOYEES : 3
THE HIGHEST PAID :-
                                Wati
                                (RM 463.04)
THE TOTAL OF EMPLOYEES THAT PAID BELOW RM 1200 per month : 1

-THANK YOU-

-----
Process exited after 97 seconds with return value 0
Press any key to continue . . .
```