

Answer on Question #44343, Programming, C

Problem.

Perera & Sons maintain their Employee Records (Maximum 10) in the following manner. Write Program for the following.

Option One

This option should allow you to enter the employee's details. You have to enter the EmpNo, EmpName, Age and Salary. (Maximum of 10 records, but need not to be 10)

Option Two

This option must display All the employee's details, in the following format.

```
Employee No. Name Age Salary
1000 Sam 26 5000
1001 Peter 27 4500
1002 Tony 25 6000
-----
-----
```

Option Three

This must allow you to enter the Over time rate and Over time hours for the Employee No.'s you have entered already. Over time rate must be a unique value for all employees. It has to calculate the Over time Amount and display that also.

(Over time Amount = Over time rate X Over time Hours)

Option Four

This option has to display the Employee's Gross Wage and Bonus details in the following format.

(Gross Wage=Salary + Over time Amount)

```
Gross Wage Bonus
<3000 No Bonus
3000 – 4499 10% of the GW
4500 – 5999 15% of the GW
>=6000 25% of the GW
```

```
Employee No. Name Gross Wage Bonus
1000 Sam Value Value
1001 Peter Value Value
1002 Tony Value Value
```

1003 John Value Value

Write the program with proper functions/procedures.

Solution.

Code

```
#include <stdio.h>
#include <stdlib.h>

int main()
{
    // counters
    int i;
    int j;

    int choose = 0;

    // amount of students
    int n = 3;
    // employee No.
    int no[10] = {};
    // employee name
    char name[][10] = {};
    // employee age
    int age[10] = {};
    // employee salary
    int salary[10] = {};
    // employee over time hours
    float hours[10] = {};
    // employee bonus
    float bonus[10] = {};
    // over time rate
    float overTimeRate;
    // over time amount
    float overTimeAmount;

    // Option One
    void read() {
        printf("Enter the amount of employees: ");
        scanf("%d", &n);

        for(i = 0; i < n; i++) {
            printf("Enter student employee no: ");
            scanf("%d", &no[i]);
            printf("Enter student employee name: ");
            scanf("%s", name[i]);
            printf("Enter student employee age: ");
            scanf("%d", &age[i]);
            printf("Enter student employee salary: ");
            scanf("%d", &salary[i]);
        }
        return;
    }

    // Option Two
    void printOut() {
        printf("Employee No. Name Age Salary\n");
        for(i = 0; i < n; i++) {
            printf("%d ", no[i]);
        }
    }
}
```

```

        printf("%s ", name[i]);
        printf("%d ", age[i]);
        printf("%d\n", salary[i]);
    }
    return;
}

// Option Three
void amount() {
    printf("Enter over time rate: ");
    scanf("%f", &overTimeRate);
    for(i = 0; i < n; i++) {
        printf("Enter over time hours for %d: ", no[i]);
        scanf("%f", &hours[i]);
    }
    for(i = 0; i < n; i++) {
        printf("Over time amount for %d ", no[i]);
        overTimeAmount = hours[i] * overTimeRate;
        printf("is %f\n", overTimeAmount);
    }
}

// Option Four
void gwBonus() {
    for(i = 0; i < n; i++) {
        float gw;
        float gwb;

        gw = hours[i] * overTimeRate + salary[i];

        if (gw < 3000) {
            gwb = 0;
        }
        if ((3000 <= gw) && (gw < 4499)) {
            gwb = 0.1;
        }
        if ((4500 <= gw) && (gw < 5999)) {
            gwb = 0.15;
        }
        if (6000 <= gw) {
            gwb = 0.25;
        }
        bonus[i] = gw * gwb;
    }
    printf("Employee No. Name Gross Wage Bonus\n");
    for(i = 0; i < n; i++) {
        printf("%d ", no[i]);
        printf("%s ", name[i]);
        printf("%f\n", bonus[i]);
    }
    return;
}

while (choose != 5) {
    printf("(1) Option One\n");
    printf("(2) Option Two\n");
    printf("(3) Option Three\n");
    printf("(4) Option Four\n");
    printf("(5) Exit\n");
    scanf("%d", &choose);

    if (choose == 1) {
        read();
    }
}

```

```

        if (choose == 2) {
            printOut();
        }
        if (choose == 3) {
            amount();
        }
        if (choose == 4) {
            gwBonus();
        }
    }
    return 0;
}

```

Result

```

"C:\Users\...\Desktop\freelance\programing\Question #44343\44343\main.exe"
Enter student employee salary: 2000
<1> Option One
<2> Option Two
<3> Option Three
<4> Option Four
<5> Exit
2
Employee No. Name Age Salary
123 name1 12 2000
<1> Option One
<2> Option Two
<3> Option Three
<4> Option Four
<5> Exit
3
Enter over time rate: 123
Enter over time hours for 123: 123
Over time amount for 123 is 15129.000000
<1> Option One
<2> Option Two
<3> Option Three
<4> Option Four
<5> Exit
4
Employee No. Name Gross Wage Bonus
123 name1 4282.250000
<1> Option One
<2> Option Two
<3> Option Three
<4> Option Four
<5> Exit

```