CSE ASSIGNMENT - 10

Problem 1

Question:

1.Write a C program to calculate gross salary of employee using stucture with pointer. Consider the following details for 5 employees: employee name,empolyee id,experience, designation, department and basic salary.

1. if the basic salary is less than or equal to 20000 then HRA =9% of the basic salary and DA=11% of the basic salary.
2. if the basic salary is less than or equal to 30000 and greater than 20000 then HRA =20% of the basic salary and DA=21% of the basic salary.
3. if the basic salary is above 50000 then HRA =25% of the basic salary and DA=30% of the basic salary. Gross salary=Basic salary+HRA+DA print the employee name,empolyee id,experience, designation, department and gross salary

Code:

```c
// Program to calculate the gross salary of an empolyee based on set constraints

#include <stdio.h>

struct employee_table
{
    char name[100], id[10], designation[50], department[50];
    int exp, sal;
};

void get_emp_details(struct employee_table *empp)
{
    printf("Enter your name : ");
    scanf(" %s", empp->name);
    printf("Enter your ID : ");
    scanf(" %s", empp->id);
    printf("How much experience do you have : ");
    scanf(" %d", &empp->exp);
    printf("What are you designated as : ");
    scanf(" %s", empp->designation);
    printf("What department do you belong to : ");
    scanf(" %s", empp->department);
    printf("What is your monthly salary : ");
    scanf(" %d", &empp->sal);
}

int main(int argc, char const *argv[])
{
    struct employee_table emp[5];
    struct employee_table *empp = emp;
```

```c
    for (int i = 0; i < 5; i++)
    {
        get_emp_details(empp++);
    }

    empp = emp;

    for (int i = 0; i < 5; i++)
    {
        printf("------Employee %d------\n\n", i + 1);
        printf("Name : %s\n", empp->name);
        printf("ID : %s\n", empp->id);
        printf("Experience : %d\n", empp->exp);
        printf("Designation : %s\n", empp->designation);
        printf("Department : %s\n", empp->department);
        printf("Gross Salary : %d\n", empp->sal <= 20000 ? (empp->sal + (9 * (empp-
>sal / 100)) + (11 * (empp->sal / 100))) : empp->sal <= 30000 ? (empp->sal + (20 *
(empp->sal / 100)) + (21 * (empp->sal / 100)))

: (empp->sal + (25 * (empp->sal / 100)) + (30 * (empp->sal / 100)))));
        empp++;
    }

    return 0;
}
```

Output:

```
Enter your name : E1
Enter your ID : 1
How much experience do you have : 1
What are you designated as : D1
What department do you belong to : Dep1
What is your monthly salary : 12000
Enter your name : E2
Enter your ID : 2
How much experience do you have : 2
What are you designated as : D2
What department do you belong to : Dep2
What is your monthly salary : 20000
Enter your name : E3
Enter your ID : 3
How much experience do you have : 3
What are you designated as : D3
What department do you belong to : Dep3
What is your monthly salary : 25000
Enter your name : E4
Enter your ID : 4
How much experience do you have : 4
What are you designated as : D4
What department do you belong to : Dep4
```

```
What is your monthly salary : 32000
Enter your name : E5
Enter your ID : 5
How much experience do you have : 5
What are you designated as : D5
What department do you belong to : Dep5
What is your monthly salary : 75000
------Employee 1------

Name : E1
ID : 1
Experience : 1
Designation : D1
Department : Dep1
Gross Salary : 14400
------Employee 2------

Name : E2
ID : 2
Experience : 2
Designation : D2
Department : Dep2
Gross Salary : 24000
------Employee 3------

Name : E3
ID : 3
Experience : 3
Designation : D3
Department : Dep3
Gross Salary : 35250
------Employee 4------

Name : E4
ID : 4
Experience : 4
Designation : D4
Department : Dep4
Gross Salary : 49600
------Employee 5------

Name : E5
ID : 5
Experience : 5
Designation : D5
Department : Dep5
Gross Salary : 116250
```