RANDOM FILE ACCESS MEMORY

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#include <stdio.h>
#include <stdlib.h>
#include <string.h>
struct Employee {
    int id;
    char name[30];
    float salary;
};
void addEmployee(FILE *fp, int n) {
    struct Employee emp;
    for (int i = 0; i < n; i++) {
        printf("\nEnter Employee %d details:\n", i + 1);
        printf("ID: ");
        scanf("%d", &emp.id);
        printf("Name: ");
        scanf("%s", emp.name);
        printf("Salary: ");
        scanf("%f", &emp.salary);
        fseek(fp, (emp.id - 1) * sizeof(emp), SEEK_SET);  // place record
        fwrite(&emp, sizeof(emp), 1, fp);
    }
}
void displayEmployee(FILE *fp, int id) {
    struct Employee emp;
    fseek(fp, (id - 1) * sizeof(emp), SEEK_SET);
    if (fread(&emp, sizeof(emp), 1, fp))
```

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        printf("\nEmployee Found:\nID: %d\nName: %s\nSalary: %.2f\n", emp.id, emp.name,
emp.salary);
    else
        printf("\nEmployee with ID %d not found.\n", id);
}
void updateEmployee(FILE *fp, int id) {
    struct Employee emp;
    fseek(fp, (id - 1) * sizeof(emp), SEEK_SET);
    if (fread(&emp, sizeof(emp), 1, fp)) {
        printf("\nCurrent Details -> ID: %d | Name: %s | Salary: %.2f\n", emp.id, emp.name,
emp.salary);
        printf("Enter new name: ");
        scanf("%s", emp.name);
        printf("Enter new salary: ");
        scanf("%f", &emp.salary);
        fseek(fp, (id - 1) * sizeof(emp), SEEK_SET);
        fwrite(&emp, sizeof(emp), 1, fp);
        printf("Employee updated successfully!\n");
    } else {
        printf("\nEmployee with ID %d not found.\n", id);
    }
}
int main() {
    FILE *fp;
    int choice, id, n;
    fp = fopen("employee.dat", "rb+");
    if (fp == NULL) {
        fp = fopen("employee.dat", "wb+");
        if (fp == NULL) {
            perror("File opening failed");
```

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        exit(1);
    }
}
while (1) {
    printf("\n--- Employee Database Menu ---\n");
    printf("1. Add Employees\n");
    printf("2. Display Employee by ID\n");
    printf("3. Update Employee by ID\n");
    printf("4. Exit\n");
    printf("Enter choice: ");
    scanf("%d", &choice);
    switch (choice) {
        case 1:
            printf("Enter number of employees to add: ");
            scanf("%d", &n);
            addEmployee(fp, n);
            break;
        case 2:
            printf("Enter Employee ID to display: ");
            scanf("%d", &id);
            displayEmployee(fp, id);
            break;
        case 3:
            printf("Enter Employee ID to update: ");
            scanf("%d", &id);
            updateEmployee(fp, id);
            break;
        case 4:
            fclose(fp);
```

```
            exit(0);
        default:
            printf("Invalid choice! Try again.\n");
    }
  }
  return 0;
}
```