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আন্তর্জাতিক ইসলামী বিশ্ববিদ্যালয় চট্টগ্রাম
الجامعة الإسلامية العالمية شيتاغونغ
International Islamic University Chittagong

Assignment

Course Title-Computer Programming 1 lab

Course Code: CSE- 1121

Assignment No. – 11

(Official & for FINAL TERM)

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Code for UPDATE in file:

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

struct Stu_Info{
        char name[100];
        int roll;
    double cgpa;
    int age;

};
typedef struct Stu_Info S;
char filePath[100] = "program.txt";

int  getrecord(S studentlist[])
{
        FILE *fp= fopen(filePath, "r");
        S std;
        int n = 0;
        while(fgets(std.name, sizeof std.name, fp) != NULL){
                strcpy(studentlist[n].name, std.name);
                fscanf(fp, "%d%lf%d\n", &std.roll, &std.cgpa, &std.age);
                studentlist[n].roll = std.roll;
                 studentlist[n].cgpa = std.cgpa;
```

```
      studentlist[n].age = std.age;
                n++;
        }
        fclose(fp);
        return n;
}

void updateRecord(char ID[100], double ngpa)
{
   S studentlist[100];
   int i;
        int n = getrecord(studentlist);
   FILE *fp = fopen(filePath, "r+");
   for(i=0; i<n;i++)
        {
                fprintf(fp, "ID: %d\nAge of Stu.: %d\nCGPA obtained: %.2lf\nName of
Stu.: %s\n", studentlist[i].roll, studentlist[i].age, studentlist[i].cgpa,
studentlist[i].name);
        }

   for(int i = 0; i < n; i++)
   {
      if(studentlist[i].roll==ID){
            studentlist[i].cgpa = ngpa;
         fprintf(fp, "ID: %d\nAge of Stu.: %d\nCGPA obtained: %.2lf\nName of
Stu.: %s\n",
```

```
                studentlist[i].roll, studentlist[i].age, studentlist[i].cgpa,
studentlist[i].name);
      }
   }

   fclose(fp);
}

int main()
{
        int temp[1000];
        updateRecord("201006", 3.99);
        return 0;
}
```

Code for sort in file:

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

struct Stu_Info{
        char name[100];
        int roll;
   double cgpa;
   int age;
```

```
};
typedef struct Stu_Info S;
char filePath[100] = "program.txt";

int  getrecord(S studentlist[])
{
        FILE *fp= fopen(filePath, "r");
        S std;
        int n = 0;
        while(fgets(std.name, sizeof std.name, fp) != NULL){
                strcpy(studentlist[n].name, std.name);
                fscanf(fp, "%d%lf%d\n", &std.roll, &std.cgpa, &std.age);
                studentlist[n].roll = std.roll;
                 studentlist[n].cgpa = std.cgpa;
       studentlist[n].age = std.age;
                n++;
        }
        fclose(fp);
        return n;
}

void sort()
{
        S studentlist[100];
        int i;
```

```
int temp, temp1, temp2;
char temps[1000];
int n = getrecord(studentlist);
for(i = 0; i< n; i++)
{
	int j;
	for(j = i; j< n; j++)
	{
		if(studentlist[j].roll < studentlist[i].roll)
		{
			temp = studentlist[i].roll;
			studentlist[i].roll = studentlist[j].roll;
			studentlist[j].roll = temp;
			strcpy(temps, studentlist[i].name);
			strcpy(studentlist[i].name, studentlist[j].name);
			strcpy(studentlist[j].name, temps);
			temp1 = studentlist[i].cgpa;
			studentlist[i].cgpa = studentlist[j].cgpa;
			studentlist[j].cgpa = temp1;
			temp2 = studentlist[i].age;
			studentlist[i].age = studentlist[j].age;
			studentlist[j].age = temp2;
		}
	}

}
```

```
        for(i=0; i<n;i++)
        {
                printf("ID: %d\nAge of Stu.: %d\nCGPA obtained: %.2lf\nName of Stu.: %s\n", studentlist[i].roll, studentlist[i].age, studentlist[i].cgpa, studentlist[i].name);
        }
}
int main()
{
        int temp[1000];
        sort();
        return 0;
}
```

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