**Department of Electrical and Computer Engineering, NSU**

**CSE 115L: Fundamentals of Computer Programming (Section 4)**

**Lab 19 (Files), Faculty: Rsl**

**Example 1 (struct and file)**

|  |  |
| --- | --- |
| #include<stdio.h>  struct person  {  char name[50];  int height;  };  void writeInFile(struct person p[],int size);  void readFromFile();  int main()  {  struct person a[2];  int i;  for(i=0; i<2; i++)  {  printf("Enter name: ");  gets(a[i].name);  printf("Enter height:");  scanf("%d",&a[i].height);  fflush(stdin);  }  writeInFile(a,2);  readFromFile();  } | void writeInFile(struct person p[],int size)  {  FILE \*fp;  int i;  fp= fopen("person.txt","a+");  if(fp!=NULL)  {  for(i=0; i<size; i++)  {  fprintf(fp,"%s ",p[i].name);  fprintf(fp,"%d\n",p[i].height);  }  printf("Successfully added........................\n");  fclose(fp);  }  else  {  printf("Cant open file! \n");  }  } |
| void readFromFile()  {  int j;  FILE \*fp=fopen("person.txt","r");  struct person stu[2];  if(fp!=NULL)  {  for(j=0; j<2; j++)  {  fscanf(fp,"%s",stu[j].name);  fscanf(fp,"%d",&stu[j].height);  }  for(j=0; j<2; j++)  {  printf("Student %d name: %s\n",j+1,stu[j].name);  printf("Student %d height: %d\n",j+1,stu[j].height);  }  fclose(fp);  }  else{  printf("Cannot open file!!\n");  }  } |

**TASK (10 marks)**

**1.** Write a C program to create an array of 3 student structures and write the values of the structure members into a file name student.txt.

struct student

2. write a function **float highestCGPA( struct student s[],int size);** that reads the cgpa from the file student.txt and returns the highestCGPA

{

char name[30];

int id;

char dept[10];

float cgpa;

};