TECHNICAL DOCUMENTATION

```
struct student
{
   char id[15];
   char name[30];
   char surname[25];
   char department[30];
   float midterm_grade;
   float final_grade;
   float total_grade;
   char lesson[25];
};
```

This is a struct of student which contains about student informations. Every student have school id, name, surname, department, lesson name, midterm grade, final grade and total grade.

MAIN FUNCTION

```
int main()
//Password();
int ch;
gotoxy(20,3);
while(1)
 {
   gotoxy(20,9);
   gotoxy(20,11);
   gotoxy(20,13);
   printf("\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2);
   gotoxy(20,15);
   printf("\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2);
   gotoxy(20,17);
   gotoxy(20,19);
```

```
xB2\xB2\xB2");
      printf("\n");
      printf("\n\n\t ENTER YOUR CHOICE:");
      scanf("%d",&ch);
    switch(ch)
       {
           case 1:
           addStudent();
           break;
          case 2:
           viewStudent();
          break;
           case 3:
           editStudent();
           break;
           case 4:
            system("cls");
           printf("\n\n\t\t YILDIRIM BEYAZIT UNIVERSITY COMPUTER ENGINEERING");
          printf("\n\n\t\t THANK YOU! THE SOFTWARE BY:BUSRA
GUL\n\n\t.....n\n\n\");
          delay(10);
           exit(0);
           default:
           printf("\n\t\t YOU ENTERED WRONG CHOICE..");
           printf("\n\t\t PRESS ANY KEY TO TRY AGAIN");
           delay(10);
          break;
       }
      system("cls");
    return 0;
}
```

In main function, some operations happen. In while loop, firstly, I print screen some sentences or words which is related to operations or functions. User enters the operation with respect to operation number(operation number is written in -> [here.]). When you select the choice, new screen opening and you can do some operations here again. Let's explain these operations:

1.ADD STUDENT: add student function is for adding new record to the file. Firstly, you entered file name which is related to lesson name. For example, you entered CALCULUS, then this file not exists, program create a file which name is CALCULUS.dat.

Then, you should enter the student informations and the record will save. After added one record, program asks you ADD ANOTHER RECORD...(Y/N) " question. If your input is y or Y, again you redirected student add function, other case, you redirecting the main page.

```
void addStudent( )
      system("cls");
      FILE *fp;
      char another = 'Y',id[15];
      struct student st;
      char filename[20];
      int choice;
      gotoxy(20,3);
      printf("\n");
      gotoxy(20,7);
      printf("\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2 ENTER LESSON NAME OF YOUR RECORD:");
      fflush(stdin);
      gets(filename);
      fp = fopen (filename, "ab+" );
      if (fp == NULL)
      fp=fopen(filename,"wb+");
      if(fp==NULL)
        printf("\n\t\t SYSTEM ERROR...");
        printf("\n\t\t PRESS ANY KEY TO EXIT");
        delay(10);
        return;
      }
      }
      while (another == 'Y'|| another=='y')
      {
        choice=0;
        fflush(stdin);
        system("cls");
      printf ( "\n\t\t\t STUDENT ID:");
      scanf("%s",id);
```

```
rewind(fp);
       while(fread(&st,sizeof(st),1,fp)==1)
       {
         if(strcmp(st.id,id)==0)
           printf("\n\t\t THE RECORD ALREADY EXISTS.\n");
           choice=1;
         }
       }
         if(choice==0)
           strcpy(st.id,id);
           printf("\n\t\t ENTER NAME:");
           fflush(stdin);
           gets(st.name);
           fflush(stdin);
           printf("\n\t\t ENTER SURNAME:");
           gets(st.surname);
           fflush(stdin);
           printf("\n\t\t\t DEPARTMENT:");
           gets(st.department);
           fflush(stdin);
           printf("\n\t\t LESSON:");
           gets(st.lesson);
           printf("\n\t\t Enter Midterm Grade: ");
           scanf("%f",&st.midterm_grade);
           printf("\n\t\t Enter Final Grade: ");
           scanf("%f",&st.final_grade);
           st.total_grade=viewGrades(st.midterm_grade,st.final_grade);
           fwrite ( &st, sizeof ( st ), 1, fp );
           system("cls");
           gotoxy(20,10);
           printf("\n");
         }
           printf ( "\n\t\t ADD ANOTHER RECORD...(Y/N) " );
           fflush (stdin);
           another = getchar();
       }
       fclose (fp);
       gotoxy(20,23);
       printf("xB2\xB2\xB2\xB2\xB2\xB2 PRESS ANY KEY TO EXIT...");
```

```
delay(10);
}
```

- 2.**VIEW STUDENT:** This function is aiming to view the added students or in other words, showing the students in to the files. Firstly, you should enter the name of lesson file for getting the students which is take that lesson. If file not exists, program warning you.Other case, you have 2 options:
- 1. View student according to id
- 2. View student according to name.

Each case, when you entered the wanted elements, you can see the information of student. End of the this function, again program asks you, WOULD YOU LIKE TO CONTINUE VIEWING...(Y/N). If you press y or Y, program will countinue, other case, you redirecting main page.

```
void viewStudent()
  FILE *fpte;
  system("cls");
  struct student st;
  char id[15],choice,filename[20],name[30],lesson[30];
  int ch;
  gotoxy(20,3);
  printf("\n");
  do
   {
      system("cls");
      gotoxy(20,5);
      ENTER THE NAME OF LESSON RECORD TO BE VIEWED:");
      fflush(stdin);
      gets(filename);
      fpte = fopen (filename, "rb");
      if (fpte == NULL)
         {
          puts ( "\nTHE RECORD DOES NOT EXIST...\n" );
          printf("PRESS ANY KEY TO EXIT...");
```

```
delay(10);
             return;
           }
      gotoxy(20,7);
      printf("\xB2\xB2\xB2\xB2\xB2 HOW WOULD YOU LIKE TO VIEW:\n");
      gotoxy(20,9);
      printf("\xB2\xB2\xB2\xB2\xB2\t1.STUDENT ID.");
      gotoxy(20,11);
      printf("\xB2\xB2\xB2\xB2\xB2\t2.STUDENT NAME");
      gotoxy(20,15);
      printf("\n\t\t ENTER YOUR CHOICE:");
      scanf("%d",&ch);
      switch(ch)
      {
        case 1:
         fflush(stdin);
         system("cls");
           printf("\n\t\t ENTER STUDENT ID:");
           gets(id);
           while (fread (&st, sizeof (st), 1, fpte) == 1)
           {
             if(strcmp(st.id,id)==0)
           gotoxy(10,5);
           printf("\n\t\t STUDENT ID: %s",st.id);
           printf("\n\t\t STUDENT NAME: %s",st.name);
           printf("\n\t\t TUDENT SURNAME: %s",st.surname);
           printf("\n\t\t DEPARTMENT: %s",st.department);
           printf("\n\t\t LESSON: %s",st.lesson);
           printf("\n\t\t Midterm Final Total\n\t\t");
           printf(" %.2f\t%.2f\t%2.f\n",st.midterm_grade,st.final_grade,st.total_grade);
           decideLetterGrade(st.total grade);
           gotoxy(10,17);
printf("\n");
          }
           }
          break;
        case 2:
         fflush(stdin);
```

```
system("cls");
           printf("\n\n\t\t ENTER STUDENT NAME:");
          gets(name);
           while (fread (&st, sizeof (st), 1, fpte) == 1)
          {
            if(strcmp(st.name,name)==0)
              gotoxy(10,5);
              printf("\n\t\t NAME: %s",st.name);
              printf("\n\t\t SURNAME: %s",st.surname);
              printf("\n\t\t STUDENT ID: %s",st.id);
              printf("\n\t\t DEPARTMENT: %s",st.department);
              printf("\n\t\t LESSON: %s",st.lesson);
              printf("\n\t\t Midterm\tFinal\t\Total\n\t\t ");
              printf("\n\t\t Midterm Final Total\n\t\t");
              printf(" %.2f\t%2.f\n",st.midterm_grade,st.final_grade,st.total_grade);
              decideLetterGrade(st.total_grade);
              gotoxy(10,17);
printf("\n");
            }
          }
           break;
      gotoxy(10,22);
      printf("\n\n\t WOULD YOU LIKE TO CONTINUE VIEWING...(Y/N):");
      fflush(stdin);
    scanf("%c",&choice);
   }while(choice=='Y'||choice=='y');
    fclose (fpte);
    return;
}
```

3.EDIT STUDENT: If you want the edit a student, this function helps you. Firstly; Again program asks you which lesson or file do you want to edit? Then, if exists, program will enter the file. Next, you should enter the student id which is for editing. After that, You can 9 options:

- 1. STUDENT ID.
- 2. STUDENT NAME
- 3. STUDENT SURNAME
- 4. STUDENT DEPARTMENT
- 5. STUDENT LESSON
- 6. STUDENT MIDTERM GRADE
- 7. STUDENT FINAL GRADE
- 8. WHOLE STUDENT INFO
- 9. GO BACK TO MAIN MENU

In options 1,2,3,4,5 and 6, you should enter the new value for related sections. For option 8, you should enter whole informations for updating. End of the entered the related section, you can see the edited value or whole record with editing values.

End of the editing or updating, program again asks you WOULD YOU LIKE TO TRY AGAIN...(Y/N). If you entered y or Y, program will start same functions again for you, othercase, you redirecting the main page.

Here is the whole code of editing:

```
RECORD TO BE EDITED: ");
     fflush(stdin);
     gets(filename);
     printf("\n\t\t ENTER STUDENT ID:");
     gets(id);
     fpte = fopen ( filename, "rb+" );
     if (fpte == NULL)
       {
        printf( "\n\t\t RECORD DOES NOT EXISTS:" );
        printf("\n\t\t PRESS ANY KEY TO GO BACK");
        delay(10);
        return;
     while (fread (&st, sizeof (st), 1, fpte) == 1)
      if(strcmp(st.id,id)==0)
       gotoxy(20,10);
       printf("\n\t\t STUDENT ID: %s",st.id);
       printf("\n\t\t\t STUDENT NAME: %s",st.name);
       printf("\n\t\t\t STUDENT SURNAME: %s",st.surname);
       printf("\n\t\t\t DEPARTMENT: %s",st.department);
       printf("\n\t\t LESSON: %s",st.lesson);
       printf("\n\t\t\t Midterm Final Total\n\t\t\t");
       printf("%.2f\t%2.f\n",st.midterm_grade,st.final_grade,st.total_grade);
       delay(3500);
       system("cls");
       printf("\n\n\t\tWHAT WOULD YOU LIKE TO EDIT..");
       gotoxy(20,5);
        gotoxy(20,7);
        gotoxy(20,9);
        gotoxy(20,11);
        gotoxy(20,13);
         gotoxy(20,15);
        GRADE");
        gotoxy(20,17);
         gotoxy(20,19);
         gotoxy(20,21);
```

```
do
    printf("\n\n\t ENTER YOUR CHOICE:");
    fflush(stdin);
    scanf("%d",&num);
    fflush(stdin);
    system("cls");
    switch(num)
      case 1:
        printf("\n\t\t NEW STUDENT ID:");
          gets(st.id);
          break;
      case 2:
          printf("\n\t\t ENTER THE NEW NAME:");
          gets(st.name);
          break;
      case 3:
           printf("\n\t\t NEW THE NEW SURNAME:");
          gets(st.surname);
          break;
      case 4:
          printf("\n\t\t NEW DEPARTMENT:");
          gets(st.department);
          break;
      case 5:
          printf("\n\t\t NEW LESSON:");
          gets(st.lesson);
          break;
         printf("\n\t\t NEW MIDTERM GRADE:");
          scanf("%f",&st.midterm_grade);
          break;
      case 7:
         printf("\n\t\tNEW FINAL GRADE:");
        scanf("%f",&st.final_grade);
        break;
      case 8:
           printf("\n\t\t NEW NAME:");
           gets(st.name);
           printf("\n\t\t NEW SURNAME:");
           gets(st.surname);
           printf("\n\t\t NEW STUDENT ID:");
```

```
gets(st.id);
                 printf("\n\t\t NEW DEPARTMENT:");
                 gets(st.department);
                 printf("\n\t\t NEW LESSON:");
                 gets(st.lesson);
                 printf("\n\t\t NEW MIDTERM GRADE:");
                 scanf("%f",&st.midterm grade);
                 printf("\n\t\t NEW FINAL GRADE:");
                 scanf("%f",&st.final_grade);
                 break;
            case 9: printf("\n\t\t PRESS ANY KEY TO GO BACK...\n");
                 delay(10);
                 return;
                 break;
            default: printf("\n\t\t YOU TYPED SOMETHING ELSE...TRY AGAIN\n");
                 break;
          }
      }while(num<1||num>9);
    fseek(fpte,-sizeof(st),SEEK_CUR);
    fwrite(&st,sizeof(st),1,fpte);
    fseek(fpte,-sizeof(st),SEEK_CUR);
    fread(&st,sizeof(st),1,fpte);
    choice=5;
    break;
  }
if(choice<9)
system("cls");
printf("\n\t\tEDITING COMPLETED...\n");
printf("----\n");
printf("THE UPDATED RECORD IS:\n");
printf("----\n");
printf("\nSTUDENT NAME: %s",st.name);
printf("\nSTUDENT SURNAME: %s",st.surname);
printf("\nSTUDENT ID: %s",st.id);
printf("\nDEPARTMENT: %s",st.department);
printf("\nLESSON: %s",st.lesson);
printf("\nMidterm Final Total\n");
printf("%.2f\t%2.f\n",st.midterm_grade,st.final_grade,st.total_grade);
fclose(fpte);
delay(2000);
printf("\n\n\t WOULD YOU LIKE TO EDIT ANOTHER RECORD.(Y/N)");
scanf("%c",&choice);
count++;
}
else
  printf("\n\t\t THE RECORD DOES NOT EXIST::\n");
```

4.**EXIT:** When all of your work finished, you can enter 4 and exit the program.

Here is the code:

```
system("cls");

printf("\n\n\t\t YILDIRIM BEYAZIT UNIVERSITY COMPUTER ENGINEERING");

printf("\n\n\t\t THANK YOU! THE SOFTWARE BY:BUSRA

GUL\n\n\t\t......\n\n\n");

delay(10);

exit(0);
```

And I have 2 additional functions which names are viewGrades and decideLetterGrade.

5.**VIEWGRADE:** In this function, I calculate the final grade with respect to midterm, final and make up grade. If make up grade is not entered, it accepted 0. This function returns the total.

```
float viewGrades(float midterm_grade, float final_grade)
{
    float total;
    float makeup_grade;

    total=((midterm_grade*0.40)+(final_grade*0.60));

    printf("\n\t\t\t Please enter Make-Up Grade: (If not exists,write '0'): ");
```

6.**DECIDELETTERGRADE:** In this function, program decides the letter according to final grade or total grade.

```
void decideLetterGrade(float t)
    if (t < 40.0)
         printf("\n\t\t Grade: FF\n\t\t factor: 0.00");
         else if (t < 50.0)
          printf("\n\t\t Grade: FD\n\t\t factor: 0.50");
               else if (t < 55.0)
              printf("\n\t\t Grade: DD\n\t\t factor: 1.00");
                   else if ( t < 60.0 )
                     printf("\n\t\t Grade: DC\n\t\t factor: 1.50");
                     else if (t < 70.0)
                          printf("\n\t\t Grade: CC\n\t\t factor: 2.00");
                       else if (t < 75.0)
                            printf("\n\t\t Grade: CB\n\t\t factor: 2.50");
                          else if ( t < 85.0 )
                               printf("\n\t\t Grade: BB\n\t\t factor: 3.00");
                            else if (t < 90.0)
                                 printf("\n\t\t Grade: BA\n\t\t factor: 3.50");
                               else
                                 printf("\n\t\t Grade: AA\n\t\t factor: 4.00");
}
```

```
#include <windows.h>
#include<stdio.h>
#include<conio.h>
#include <stdlib.h>
#include<string.h>
#include<ctype.h>
#include<dos.h>
#include<time.h>
void addStudent();
void viewStudent();
void editStudent();
void decideLetterGrade(float t);
float viewGrades(float midterm_grade, float final_grade);
void Password();
char password[10]={"pokhara"};
COORD coord = {0, 0}; // sets coordinates to 0,0
//COORD max_buffer_size = GetLargestConsoleWindowSize(hOut);
COORD max_res,cursor_size;
void gotoxy (int x, int y)
    coord.X = x; coord.Y = y; // X and Y coordinates
    SetConsoleCursorPosition(GetStdHandle(STD_OUTPUT_HANDLE), coord);
}
void delay(unsigned int mseconds)
  clock_t goal = mseconds + clock();
  while (goal > clock());
}
struct student
  char id[15];
  char name[30];
  char surname[25];
  char department[30];
  float midterm_grade;
  float final_grade;
  float total_grade;
  char lesson[25];
```

```
int main()
//Password();
int ch;
gotoxy(20,3);
while(1)
 {
   gotoxy(20,9);
   gotoxy(20,11);
   gotoxy(20,13);
   gotoxy(20,15);
   printf("\xB2\xB2\xB2\xB2\xB2\xB2 EDIT STUDENT[3]");
   gotoxy(20,17);
   gotoxy(20,19);
xB2\xB2\xB2\xB2");
   printf("\n");
   printf("\n\n\t ENTER YOUR CHOICE:");
   scanf("%d",&ch);
  switch(ch)
     case 1:
     addStudent();
     break;
     case 2:
     viewStudent();
     break;
     case 3:
     editStudent();
     break;
     case 4:
```

```
system("cls");
           printf("\n\n\t\t YILDIRIM BEYAZIT UNIVERSITY COMPUTER ENGINEERING");
           printf("\n\n\t\t THANK YOU! THE SOFTWARE BY:BUSRA
delay(10);
           exit(0);
           default:
           printf("\n\t\t YOU ENTERED WRONG CHOICE..");
          printf("\n\t\t PRESS ANY KEY TO TRY AGAIN");
          delay(10);
          break;
       }
      system("cls");
    return 0;
void addStudent( )
      system("cls");
      FILE *fp;
      char another = 'Y',id[15];
      struct student st;
      char filename[20];
      int choice;
      gotoxy(20,3);
      STUDENT ADD MENU
printf("\n");
      gotoxy(20,7);
      fflush(stdin);
      gets(filename);
      fp = fopen (filename, "ab+" );
      if (fp == NULL)
      fp=fopen(filename,"wb+");
      if(fp==NULL)
       printf("\n\t\t SYSTEM ERROR...");
       printf("\n\t\t PRESS ANY KEY TO EXIT");
       delay(10);
       return;
      }
      }
      while ( another == 'Y' | | another=='y' )
```

```
choice=0;
         fflush(stdin);
         system("cls");
       printf ( "\n\t\t\t STUDENT ID:");
       scanf("%s",id);
       rewind(fp);
       while(fread(&st,sizeof(st),1,fp)==1)
       {
         if(strcmp(st.id,id)==0)
           printf("\n\t\t THE RECORD ALREADY EXISTS.\n");
           choice=1;
         }
       }
         if(choice==0)
           strcpy(st.id,id);
           printf("\n\t\t ENTER NAME:");
           fflush(stdin);
           gets(st.name);
           fflush(stdin);
           printf("\n\t\t ENTER SURNAME:");
           gets(st.surname);
           fflush(stdin);
           printf("\n\t\t DEPARTMENT:");
           gets(st.department);
           fflush(stdin);
           printf("\n\t\t LESSON:");
           gets(st.lesson);
           printf("\n\t\t Enter Midterm Grade: ");
           scanf("%f",&st.midterm_grade);
           printf("\n\t\t\t Enter Final Grade: ");
           scanf("%f",&st.final_grade);
           st.total_grade=viewGrades(st.midterm_grade,st.final_grade);
           fwrite ( &st, sizeof ( st ), 1, fp );
           system("cls");
           gotoxy(20,10);
           printf("\n");
         }
           printf ( "\n\t\t ADD ANOTHER RECORD...(Y/N) " );
           fflush (stdin);
           another = getchar();
```

```
}
      fclose (fp);
      gotoxy(20,23);
      printf("xB2\xB2\xB2\xB2\xB2\xB2 PRESS ANY KEY TO EXIT...");
      delay(10);
 }
void viewStudent()
   FILE *fpte;
   system("cls");
   struct student st;
   char id[15],choice,filename[20],name[30],lesson[30];
   int ch;
   gotoxy(20,3);
   STUDENT VIEWING MENU
printf("\n");
   do
    {
        system("cls");
        gotoxy(20,5);
        ENTER THE NAME OF LESSON RECORD TO BE VIEWED:");
        fflush(stdin);
        gets(filename);
        fpte = fopen ( filename, "rb" );
        if (fpte == NULL)
           {
             puts ( "\nTHE RECORD DOES NOT EXIST...\n" );
             printf("PRESS ANY KEY TO EXIT...");
             delay(10);
             return;
           }
      gotoxy(20,7);
      printf("\xB2\xB2\xB2\xB2\xB2 HOW WOULD YOU LIKE TO VIEW:\n");
      gotoxy(20,9);
      printf("\xB2\xB2\xB2\xB2\xB2\t1.STUDENT ID.");
      gotoxy(20,11);
      printf("\xB2\xB2\xB2\xB2\xB2\t2.STUDENT NAME");
      gotoxy(20,15);
      printf("\n\t\t ENTER YOUR CHOICE:");
      scanf("%d",&ch);
      switch(ch)
```

```
{
       case 1:
        fflush(stdin);
        system("cls");
          printf("\n\t\t ENTER STUDENT ID:");
          gets(id);
          while ( fread ( &st, sizeof ( st ), 1, fpte ) == 1 )
          {
           if(strcmp(st.id,id)==0)
          gotoxy(10,5);
          printf("\n\t\t STUDENT ID: %s",st.id);
          printf("\n\t\t STUDENT NAME: %s",st.name);
          printf("\n\t\t TUDENT SURNAME: %s",st.surname);
          printf("\n\t\t DEPARTMENT: %s",st.department);
          printf("\n\t\t LESSON: %s",st.lesson);
          printf("\n\t\t Midterm Final Total\n\t\t");
          printf(" %.2f\t%2.f\n",st.midterm_grade,st.final_grade,st.total_grade);
          decideLetterGrade(st.total_grade);
          gotoxy(10,17);
xB2");
          printf("\n");
         }
         break;
       case 2:
        fflush(stdin);
        system("cls");
          printf("\n\n\t\t ENTER STUDENT NAME:");
          gets(name);
          while ( fread ( &st, sizeof ( st ), 1, fpte ) == 1 )
          {
           if(strcmp(st.name,name)==0)
             gotoxy(10,5);
             printf("\n\t\t NAME: %s",st.name);
             printf("\n\t\t SURNAME: %s",st.surname);
             printf("\n\t\t STUDENT ID: %s",st.id);
             printf("\n\t\t DEPARTMENT: %s",st.department);
```

```
printf("\n\t\t LESSON: %s",st.lesson);
            printf("\n\t\t Midterm\tFinal\t\Total\n\t\t ");
            printf("\n\t\t Midterm Final Total\n\t\t");
            printf("
%.2f\t%.2f\t%2.f\n",st.midterm_grade,st.final_grade,st.total_grade);
            decideLetterGrade(st.total_grade);
            gotoxy(10,17);
xB2");
            printf("\n");
          }
         }
         break;
     gotoxy(10,22);
     printf("\n\n\t WOULD YOU LIKE TO CONTINUE VIEWING...(Y/N):");
     fflush(stdin);
    scanf("%c",&choice);
  }while(choice=='Y'||choice=='y');
    fclose (fpte);
    return;
}
void editStudent()
  system("cls");
  FILE *fpte;
  struct student st;
  char id[15],choice,filename[20];
  int num,count=0;
  gotoxy(20,3);
  STUDENT EDITING MENU
printf("\n");
  do
    {
      system("cls");
      gotoxy(20,5);
      RECORD TO BE EDITED: ");
      fflush(stdin);
```

```
gets(filename);
     printf("\n\t\t\t ENTER STUDENT ID:");
     gets(id);
     fpte = fopen (filename, "rb+");
     if (fpte == NULL)
         printf( "\n\t\t RECORD DOES NOT EXISTS:" );
         printf("\n\t\t PRESS ANY KEY TO GO BACK");
         delay(10);
         return;
       }
     while (fread (&st, sizeof (st), 1, fpte) == 1)
      if(strcmp(st.id,id)==0)
       gotoxy(20,10);
       printf("\n\t\t\t STUDENT ID: %s",st.id);
       printf("\n\t\t\t STUDENT NAME: %s",st.name);
       printf("\n\t\t\t STUDENT SURNAME: %s",st.surname);
       printf("\n\t\t\t DEPARTMENT: %s",st.department);
       printf("\n\t\t LESSON: %s",st.lesson);
       printf("\n\t\t Midterm Final Total\n\t\t\t");
       printf("%.2f\t%.2f\t%2.f\n",st.midterm grade,st.final grade,st.total grade);
       delay(3500);
       system("cls");
       printf("\n\n\t\tWHAT WOULD YOU LIKE TO EDIT..");
       gotoxy(20,5);
         gotoxy(20,7);
         gotoxy(20,9);
         gotoxy(20,11);
         gotoxy(20,13);
         gotoxy(20,15);
         GRADE");
         gotoxy(20,17);
         gotoxy(20,19);
         gotoxy(20,21);
         MENU.");
         do
```

```
printf("\n\n\t ENTER YOUR CHOICE:");
fflush(stdin);
scanf("%d",&num);
fflush(stdin);
system("cls");
switch(num)
  case 1:
    printf("\n\t\t NEW STUDENT ID:");
      gets(st.id);
      break;
  case 2:
     printf("\n\t\t ENTER THE NEW NAME:");
      gets(st.name);
      break;
  case 3:
      printf("\n\t\t NEW THE NEW SURNAME:");
      gets(st.surname);
      break;
  case 4:
      printf("\n\t\t NEW DEPARTMENT:");
      gets(st.department);
      break;
  case 5:
      printf("\n\t\t NEW LESSON:");
      gets(st.lesson);
      break;
  case 6:
    printf("\n\t\t NEW MIDTERM GRADE:");
      scanf("%f",&st.midterm_grade);
      break;
  case 7:
    printf("\n\t\tNEW FINAL GRADE:");
    scanf("%f",&st.final_grade);
    break;
  case 8:
      printf("\n\t\t NEW NAME:");
      gets(st.name);
       printf("\n\t\t NEW SURNAME:");
      gets(st.surname);
      printf("\n\t\t NEW STUDENT ID:");
      gets(st.id);
      printf("\n\t\t NEW DEPARTMENT:");
```

```
gets(st.department);
                 printf("\n\t\t NEW LESSON:");
                 gets(st.lesson);
                 printf("\n\t\t NEW MIDTERM GRADE:");
                 scanf("%f",&st.midterm_grade);
                 printf("\n\t\t NEW FINAL GRADE:");
                 scanf("%f",&st.final_grade);
                 break;
            case 9: printf("\n\t\t PRESS ANY KEY TO GO BACK...\n");
                delay(10);
                return;
                break;
            default: printf("\n\t\t YOU TYPED SOMETHING ELSE...TRY AGAIN\n");
                 break;
          }
      }while(num<1||num>9);
    fseek(fpte,-sizeof(st),SEEK_CUR);
    fwrite(&st,sizeof(st),1,fpte);
    fseek(fpte,-sizeof(st),SEEK_CUR);
    fread(&st,sizeof(st),1,fpte);
    choice=5;
    break;
 }
}
if(choice<9)
system("cls");
printf("\n\t\tEDITING COMPLETED...\n");
printf("----\n");
printf("THE UPDATED RECORD IS:\n");
printf("----\n");
printf("\nSTUDENT NAME: %s",st.name);
printf("\nSTUDENT SURNAME: %s",st.surname);
printf("\nSTUDENT ID: %s",st.id);
printf("\nDEPARTMENT: %s",st.department);
printf("\nLESSON: %s",st.lesson);
printf("\nMidterm Final Total\n");
printf("%.2f\t%2.f\n",st.midterm_grade,st.final_grade,st.total_grade);
fclose(fpte);
delay(2000);
printf("\n\n\t WOULD YOU LIKE TO EDIT ANOTHER RECORD.(Y/N)");
scanf("%c",&choice);
count++;
}
else
  printf("\n\t\t THE RECORD DOES NOT EXIST::\n");
  printf("\n\t\t WOULD YOU LIKE TO TRY AGAIN...(Y/N)");
  scanf("%c",&choice);
```

```
}
      }while(choice=='Y'||choice=='y');
      fclose (fpte);
      if(count==1)
      printf("\n%d FILE IS EDITED...\n",count);
      else if(count>1)
      printf("\n%d FILES ARE EDITED..\n",count);
      printf("\nNO FILES EDITED...\n");
      printf("\tPRESS ENTER TO EXIT EDITING MENU.");
      delay(10);
}
float viewGrades(float midterm_grade, float final_grade)
    float total;
    float makeup_grade;
               total=((midterm_grade*0.40)+(final_grade*0.60));
               printf("\n\t\t Please enter Make-Up Grade: (If not exists,write '0'): ");
               scanf("%f", &makeup_grade);
                 if ( makeup_grade == 0.0 )
                    total = ( midterm_grade * 0.40 ) + ( final_grade * 0.60 );
                      else
                    total = ( midterm_grade * 0.40 ) + ( makeup_grade * 0.60 );
          return total;
  }
void decideLetterGrade(float t)
    if (t < 40.0)
        printf("\n\t\t Grade: FF\n\t\t factor: 0.00");
        else if ( t < 50.0 )
          printf("\n\t\t Grade: FD\n\t\t factor: 0.50");
              else if ( t < 55.0 )
             printf("\n\t\t Grade: DD\n\t\t factor: 1.00");
                  else if ( t < 60.0 )
```