**CSE 115 Lab on Files – Ara2**

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| 1. **Making a text file:**   #include<stdio.h>  void main()  {  FILE \*fp;  fp=fopen("test.txt","r");  if(fp != NULL)  {  printf("File opened");  fclose(fp);  }  else printf("Error");  } | 1. **Writing user inputs to a text file:**   #include<stdio.h>  #include<string.h>  void main()  {  FILE \*fp;  char buffer[30];  fp=fopen("test.txt","w");  if(fp == NULL)  {  printf("Error"); return;  }  while(1){  gets(buffer);  if(strcmp(buffer,"")==0) break;  fprintf(fp,buffer);  }  fclose(fp);  } |
| 1. **Reading from a text file:**   #include<stdio.h>  #include<string.h>  void main()  {  FILE \*fp;  fp=fopen("test.txt","r");  char c;  while((c=getc(fp))!=EOF)  putchar(c);  fclose(fp);  } | 1. **Appending to a text file:**   #include<stdio.h>  #include<string.h>  int main()  {  FILE \*fp;  fp=fopen("test.txt","a");  fprintf(fp,"Added stuffs");  fclose(fp);  return 0;  } |

1. **Writing multiple entries to files:**

#include<stdio.h>

#include<string.h>

void main()

{

FILE \*fpointer;

fpointer = fopen("input.txt", "w");

fprintf(fpointer, "Bob\n30\n20000\n");

fprintf(fpointer, "Amanda\n20\n10000\n");

fclose(fpointer);

}

1. **Reading multiple entries from files:**

#include<stdio.h>

#include<string.h>

void main()

{

FILE \*fpointer;

char name[100];

int age;

float salary;

fpointer = fopen("input.txt", "r");

while(fscanf (fpointer, "%s%d%f", name, &age, &salary)== 3)

{

if(name[strlen(name) - 1] == '\n')

name[strlen(name) - 1] = '\0';

printf("%s\n%d\n%f\n", name, age, salary);

if(feof(fpointer) == 1) break;

}

fclose(fpointer);

}

1. **Writing structures to files:**

#include <stdio.h>

#include <stdlib.h>

struct customer

{

char fname[20],lname[20];

int acct\_num;

float acct\_balance;

} cust[100];

void main ()

{

FILE \*file;

file = fopen ("accounts.dat","w");

if (file == NULL)

{

fprintf(stderr, "\nError opening accounts.dat\n\n");

exit (1);

}

int i;

for(i=0; i<100; i++)

{

printf ("Firstname:");

gets(cust[i].fname);

if(strcmp(cust[i].fname,"")==0) break;

fflush(stdin);

printf ("Lastname:");

gets(cust[i].lname);

fflush(stdin);

printf ("Acct No:");

scanf("%d", &cust[i]. acct\_num);

fflush(stdin);

printf ("Acct Balance:");

scanf("%f", &cust[i].acct\_balance);

fflush(stdin);

}

fwrite(cust, sizeof(struct customer), i, file);

fclose(file);

}

1. **Reading structures from files:**

#include <stdio.h>

#include <stdlib.h>

struct customer

{

char fname[20],lname[20];

int acct\_num;

float acct\_balance;

};

void main ()

{

FILE \*infile;

struct customer input[100];

infile = fopen ("accounts.dat","r");

if (infile == NULL)

{

fprintf(stderr, "\nError opening accounts.dat\n\n");

exit (1);

}

int i, num = fread (input, sizeof(struct customer), 100, infile);

for(i=0; i<num; i++)

{

printf ("Name: %s %s, Acct# %d, Balance=%0.2f\n",

input[i].fname, input[i].lname, input[i].acct\_num, input[i].acct\_balance);

}

fclose(infile);

}

**Exercise:**

Incorporate reading & writing to/from file in your project so that each time user starts the program, it doesn’t read from user, instead reads from file. Also, just before the program finishes, the program should save the array in a file.