Q:1) C program to write all the members of an array of structures to a file using fwrite(). Read the array from the file and display on the screen.

#include<stdio.h>

#include<string.h>

#include<stdlib.h>

struct hospital

{

char name[20];

char add[20];

//int id\_no;

int room\_no;

}\*db=NULL;

int cnt=0;

int flag;

int printmenu()

{

printf("\nMENU\n");

printf("--------------------------\n");

printf("Enter for :\n");

printf(" 1 :input\n 2: print\n 3: save\n 4: quit\n");

//scanf("%d",&option);

}

void input()

{

static int num;

db=realloc(db,(cnt+1)\*sizeof(struct hospital));

printf("enter patient name:\n");

// gets(db[cnt].name);

scanf("%s",&db[cnt].name);

\_\_fpurge();

printf("enter address:\n");

gets(db[cnt].add);

printf("enter room no:\n");

scanf("%d",&db[cnt].room\_no);

//db[cnt].id\_no=cnt+1;

cnt++;

flag=0;

}

void print()

{

int i;

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

{

printf("record %d: %20s %20s %d\n",i,db[i].name,db[i].add,db[i].room\_no);

}

}

void save()

{

FILE \*fp;

fp=fopen("hospital.dat","w");

fwrite(db,sizeof (struct hospital),cnt,fp);

fclose(fp);

flag=1;

}

void syncfile()

{

int temp=0;

FILE \*fp;

fp=fopen("hospital.dat","r");

if(fp==NULL)

return 0;

fseek(fp,0,2);

cnt=ftell(fp)/sizeof(struct hospital);

db=malloc(cnt\*sizeof(struct hospital));

fseek(fp,0,0);

fread(db,sizeof(struct hospital),cnt,fp);

fclose(fp);

}

int main()

{

char choice;

int option;

syncfile();//read data from student.dat file

while(1)

{

printmenu();

scanf("%d",&option);

switch (option)

{

case 1 : input();

break;

case 2: print();

break;

case 3: save();

break;

case 4: if(flag==0)

{

printf("warning you have to saved record\n");

printf("do u want to save now(y/n)\n");

scanf("%c",&choice);

if(choice=='y')

save();

}

return 0;

default :printf("invalid input\n");

break;

}

}

}