1. Write a C program which can input some rivers name, length and country of origin. Display the name of the longest river.

#include<stdio.h>

int main()

{

struct river

{

char name[100], origin[100];

float length;

};

int i,n,m,p;

struct river x[100];

printf("Enter the total number of rivers:\n");

scanf("%d",&n);

printf("Enter the name, length, origin one by one:\n");

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

{

scanf("%s",x[i].name);

scanf("%f",&x[i].length);

scanf("%s",x[i].origin);

}

m=x[0].length;

p=0;

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

{

if(x[i].length>m)

{

m=x[i].length;

p=i;

}

}

printf("%s\n",x[p].name);

return 0;

}

2. Write a C program which can input some book’s name, author’s name, pages, price. Display the book’s information which’s name containing the highest number of vowels.

#include<stdio.h>

#include<string.h>

int main()

{

struct books

{

char bname[100], aname[100] ;

int pages, price;

};

char m;

int i,j,n,p,a,b;

struct books x[100];

printf("Enter the total number of books:\n");

scanf("%d",&n);

printf("Enter the each books name, authors name, pages, price one by one:\n");

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

{

scanf("%s",x[i].bname);

scanf("%s",x[i].aname);

scanf("%d",&x[i].pages);

scanf("%d",&x[i].price);

}

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

{

m=strlen(x[i].bname);

a=0;

for(j=0;j<m;j++)

if(x[i].bname[j]=='a' || x[i].bname[j]=='e' || x[i].bname[j]=='i' || x[i].bname[j]=='o' || x[i].bname[j]=='u' ||

x[i].bname[j]=='A' || x[i].bname[j]=='E' || x[i].bname[j]=='I' || x[i].bname[j]=='O' || x[i].bname[j]=='U')

{

a++;

}

}

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

{

m=strlen(x[i].bname);

b=0;

for(j=0;j<m;j++)

if(a>b)

{

p=i;

}

}

printf("%s\n%s\n%d\n%d\n",x[p].bname,x[p].aname,x[p].pages,x[p].price);

return 0;

}

3. Write a C program which can input some fruits name, price, typical lowest weight, typical highest weight. Display all the fruits information which’s name start with a vowel.

#include<stdio.h>

#include<string.h>

int main()

{

struct fruits

{

char name[100] ;

int price;

float lw, hw;

};

char m;

int i,n,p;

struct fruits x[100];

printf("Enter the total number of fruits:\n");

scanf("%d",&n);

printf("Enter the fruits name, price, typical lowest weight, typical highest weight one by one:\n");

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

{

scanf("%s",x[i].name);

scanf("%d",&x[i].price);

scanf("%f",&x[i].lw);

scanf("%f",&x[i].hw);

}

p=0;

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

{

if(x[i].name[0]=='a' || x[i].name[0]=='e' || x[i].name[0]=='i' || x[i].name[0]=='o' || x[i].name[0]=='u' || x[i].name[0]=='A' || x[i].name[0]=='E' || x[i].name[0]=='I' || x[i].name[0]=='O' || x[i].name[0]=='U')

{

p=i;

printf("%s\n%d\n%.2f\n%.2f\n",x[p].name,x[p].price,x[p].lw,x[p].hw);

}

}

return 0;

}