#include <stdio.h>

#include <string.h>

#include <ctype.h>

intlength[10] = {0, 0, 0, 0, 0, 0, 0, 0, 0, 0};

charx[10][20];

int counter=0;

voidinput()

{

char c;

inti;

int j;

int k;

charword[20];

if(counter>=10)

{

printf("it's already 10 words\n");

}

else

{

for(i=0;i<10;i++)

{

printf("word:");

if (scanf("%s",word) <1)

break;

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

{

if(strcmp(word, x[j])<0)

break;

}

for(k=i;k>=j;k--)

strcpy(x[k+1],x[k]);

strcpy(x[j],word);

}

}

counter=i;

}

voidreverse()

{

inti;

int j;

chartemp[50];

charword[20];

for(i=0;i<counter/2;i++)

{

strcpy(temp,x[i]);

strcpy(x[i],x[counter-i-1]);

strcpy(x[counter-i-1],temp);

}

}

intconvert()

{

int count;

char \*str;

inti;

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

{

count = 0;

str=x[i];

while(\*str!='\0')

{

count++;

if(islower(\*str))

{

\*str=toupper(\*str);

}

str++;

}

length[i] = count;

}

}

void

info()

{

intlposition;

intsposition;

inti;

char \*str;

char \*other;

float average=0.0;

int sum=0;

int longest;

int shortest;

longest = length[0];

shortest = length[0];

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

{

if(length[i] > longest)

{

lposition = i;

longest = length[i];

}

if(length[i] < shortest)

{

sposition = i;

shortest = length[i];

}

str=x[i];

while(\*str!='\0')

{

sum++;

str++;

}

}

average = (float)sum/counter;

printf("The longest word is %s\n The shortest word is %s\n", x[lposition], x[sposition]);

printf("The average length of the words is %f\n", average);

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

{

other = &x[i][0];

int first = (int)\*other;

if(isalpha(first) == 0)

{

printf("%s is not alphabetic\n", x[i]);

}

}

}

void

outout()

{

inti;

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

{

printf (" %d :%s\n ", i+1, x[i]);

}

}

intmain()

{ printf("input\n");

input();

outout();

printf("reverse\n");

reverse();

outout();

printf("convert\n");

convert();

outout();

printf("info\n");

info();

return1;

}