**字符串去重复**

#include<stdio.h>

#define N 100

int main ()

{

char name[N];

int i,j;

printf("Input some chars:\n");

for(i=0;(name[i]=getchar())!='\n';i++);

for(i=0;name[i]!='\n';i++)

{

if(name[i]==name[i+1])

{

for(j=i;name[j]!='\n';j++)

name[j]=name[j+1];

i--;

}

}

for(i=0;name[i]!='\n';i++)

printf("%c",name[i]);

return 0;

}

**括号匹配**

#include<stdio.h>

#define N 100

int main()

{

int i,sum=0,x=0,y=0;

char ch;

char exp[N];

scanf("%s",exp);

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

{

if(exp[i]=='(')

x++;

if(exp[i]==')')

y++;

}

if(x!=y)

printf("不匹配！");

else

{

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

{

if(exp[i]=='(')

x++;

if(exp[i]==')')

y++;

if(x<y)

{

printf("不匹配！");

return 0;

}

}

printf("匹配！");

}

}

**范例2**

**范例5**

**插入数字**

#include<stdio.h>

int main()

{

int x[21];

int m,n,i,k;

printf("Please input n(n<=20):\n");

scanf("%d",&n);

printf("Please input n numbers:\n");

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

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

printf("Please determine m:\n");

scanf("%d",&m);

printf("Insert number:\n");

scanf("%d",&k);

for(i=n-1;i>=m;i--)

x[i+1]=x[i];

x[m]=k;

for(i=0;i<n+1;i++)

printf("%4d",x[i]);

}

**姓名成绩排序 冒泡**

#include<stdio.h>

#include<string.h>

#define N 3

int main ()

{

char name[N][20]={0};

char p[20];

int score[N];

int i,j,k,temp;

printf("Input the name first:\n");

for(i=0;i<=N-1;i++)

for(j=0;(name[i][j]=getchar())!='\n';j++);

printf("Then input the scores\n");

for(i=0;i<=N-1;i++)

scanf("%d",&score[i]);

for(i=0;i<N-1;i++)

{

for(j=0;j<N-1-i;j++)

{

if (score[j]<score[j+1])

{

temp=score[j];

score[j]=score[j+1];

score[j+1]=temp;

strcpy(p,name[j]);

strcpy(name[j],name[j+1]);

strcpy(name[j+1],p);

}

}

}

printf("The rank is:\n");

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

{

printf("%d ",score[i]);

for(j=0;name[i][j]!='\n';j++)

printf("%c",name[i][j]);

printf("\n");

}

return 0;

}

**姓名成绩排序 选择排序**

#include<stdio.h>

#include<string.h>

#define N 3

int main ()

{

char name[N][20]={0};

char p[20];

int score[N];

int i,j,k,temp;

printf("Input the name first:\n");

for(i=0;i<=N-1;i++)

for(j=0;(name[i][j]=getchar())!='\n';j++);

printf("Then input the scores\n");

for(i=0;i<=N-1;i++)

scanf("%d",&score[i]);

for(i=0;i<N-1;i++)

{

k=i;

for(j=i+1;j<N;j++)

{

if(score[j]>score[k])

k=j;

}

if(k!=i)

{

temp=score[k];

score[k]=score[i];

score[i]=temp;

strcpy(p,name[k]);

strcpy(name[k],name[i]);

strcpy(name[i],p);

}

}

printf("The rank is:\n");

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

{

printf("%d ",score[i]);

for(j=0;name[i][j]!='\n';j++)

printf("%c",name[i][j]);

printf("\n");

}

return 0;

}

**字符串连接**

#include<stdio.h>

void udf\_strcat(char s[100],char t[100])

{

int i,j;

for (i=0;s[i];i++);

for (j=0;s[i]=t[j];i++,j++);

printf("%s",s);

}

int main ()

{

int i=0;

char c,d;

char s[100] = "";

char t[100] = "";

printf("input s[]:\n");

scanf("%c",&c);

for(i=0;c!='\n';i++)

{

s[i]=c;

scanf("%c",&c);

}

printf("input t[]:\n");

scanf("%c",&d);

for(i=0;d!='\n';i++)

{

t[i]=d;

scanf("%c",&d);

}

udf\_strcat(s,t);

return 0;

}

**折半查找**

#include <stdio.h>

#define N 15

int main()

{

int a[N]={1,2,3,4,5,13,19,21,37,56,64,75,80,88,92};

int key, low=0, mid, high=N-1;

printf("Input key: \n");

scanf("%d", &key);

while (low <= high)

{

mid = (low + high) / 2;

if (key > a[mid])

low = mid + 1;

else if (key == a[mid])

{

printf("a[%d]=%d\n", mid, key);

return 0;

}

else

high = mid - 1;

}

printf("无此数!\n");

return -1;

}