第十一周程序设计作业

11月14号作业：

1、

(1) 12

(2) 6

(3) 8

2、

#include<stdio.h>

#include<string.h>

main()

{

char a[100],b[100],\* str0, \* str1, \* str2;

printf("请输入str1：");

gets(a);

printf("请输入str2：");

gets(b);

str1 = a; str2 = b;

if (strcmp(str1, str2) > 0)

{

str0 = str1;

str1 = str2;

str2 = str0;

}

printf("从小到大:%s %s\n", str1, str2);

}

4、

#include<stdio.h>

#include<string.h>

main()

{

char a[100], \* p;

void disp(char\* s, int);

printf("请输入一段字符串：");

gets (a);

p = a + 3;

printf("第4~10个字符为：");

disp(p, 7);

printf("\n");

}

void disp(char\* s, int n)

{

int i = 0;

while (\*s != '\0' && i < n)

{

printf("%c", \*(s + i));

i++;

}

}

11、

#include<stdio.h>

main(int argc,char\*argv[])

{

int i;

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

printf(" %s", argv[i]);

}

12、

#include<stdio.h>

#include<math.h>

/\*编写计算复数指数的函数\*/

void f1(double\* x, double\* y, double\* u, double\* v)

{

double p=\*x, q=\*y;

x = u; y = v;

\*u = exp(p) \* cos(q); \*v = exp(p) \* sin(q);

}

/\*编写计算复数对数的函数\*/

void f2(double\* x, double\* y, double\* u, double\* v)

{

double p = \*x, q = \*y;

x = u; y = v;

\*u = log(sqrt(p \* p + q \* q)); \*v = atan(q / p);

}

/\*编写计算复数正弦的函数\*/

void f3(double\* x, double\* y, double\* u, double\* v)

{

double p = \*x, q = \*y;

x = u; y = v;

\*u = sin(p) \* (exp(q) + exp(-q)) / 2; \*v = cos(p) \* (exp(q) - exp(-q)) / 2;

}

/\*编写计算复数余弦的函数\*/

void f4(double\* x, double\* y, double\* u, double\* v)

{

double p = \*x, q = \*y;

x = u; y = v;

\*u = cos(p) \* (exp(q) + exp(-q)) / 2; \*v = -sin(p) \* (exp(q) - exp(-q)) / 2;

}

main()

{

double x, y, u, v, u1, v1, u2, v2, u3, v3;

printf("请输入复数z=x+jy的实部和虚部：");

scanf("%lf %lf", &x, &y);

f1(&x, &y, &u, &v);

printf("exp(%lf+j%lf) = %lf+j%lf\n", x, y, u, v);

f2(&u, &v, &u1, &v1);

printf("ln(%lf+j%lf) = %lf+j%lf\n", u, v, u1, v1);

f3(&u1, &v1, &u2, &v2);

printf("sin(%lf+j%lf) = %lf+j%lf\n", u1, v1, u2, v2);

f4(&u2, &v2, &u3, &v3);

printf("cos(%lf+j%lf) = %lf+j%lf\n", u2, v2, u3, v3);

}

13、

#include<stdio.h>

#include<string.h>

main()

{

void m(char\* [], int);

int i, n = 9;

char\* s[9] = { "zhang","gou","xu","zheng","mao","zhao","li","bai","qing" };

printf("原顺序：");

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

printf(" %s", \* (s+i));

printf("\n");

printf("排序后：");

m(s, n);

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

printf(" %s", \*(s + i));

printf("\n");

}

/\*编写冒泡排序字符串的函数\*/

void m(char\* s[], int n)

{

int i, j;

char \*str;

for(i=1;i<=n-1;i++)//外层是比较的轮数，共n-1轮

for(j=0;j<=(n-1)-i;j++)//内层是每轮比较的次数，每轮（n-1）-i次

if (strcmp(s[j],s[j+1])==1)

{

str = s[j];

s[j] = s[j + 1];

s[j + 1] = str;

}

}