#include<stdio.h>

#include<string.h>

void T9(int a[9])

{

int i, j, t;

int\* p = a;

printf("before:\n");

for (i = 0; i <= 8; i++)

{

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

if (i % 3 == 2)printf("\n");

}

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

for (j = i; j <= 2; j++)

{

t = \*(p + 3 \* i + j);

\*(p + 3 \* i + j) = \*(p + 3 \* j + i);

\*(p + 3 \* j + i) = t;

}

printf("now:\n");

for (i = 0; i <= 8; i++)

{

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

if (i % 3 == 2)printf("\n");

}

}

void T10(int a[])

{

int i, j, k;

int\* pd = a, \* px = a;

int\* p = a;

printf("before:\n");

for (i = 0; i <= 24; i++)

{

printf("%3d", a[i]);

if (i % 5 == 4)putchar('\n');

}

for (i = 0; i <= 24; i++)if (\*pd < a[i])pd = &a[i];

k = \*pd;

\*pd = \*(p + 5 \* 2 + 2);

\*(p + 5 \* 2 + 2) = k;

for (i = 0; i <= 24; i++)if (\*px > a[i])px = &a[i];

k = \*px;

\*px = \*(p + 5 \* 0 + 0);

\*(p + 5 \* 0 + 0) = k;

px++;

for (i = 0; i <= 24; i++)if (i != 0 && \*px > a[i])px = &a[i];

k = \*px;

\*px = \*(p + 5 \* 0 + 4);

\*(p + 5 \* 0 + 4) = k;

px++;

for (i = 0; i <= 24; i++)if (\*px > a[i] && i != 0 && i != 4)px = &a[i];

k = \*px;

\*px = \*(p + 5 \* 4 + 0);

\*(p + 5 \* 4 + 0) = k;

px++;

for (i = 0; i <= 24; i++)if (\*px > a[i] && i != 0 && i != 4 && i != 20)px = &a[i];

k = \*px;

\*px = \*(p + 5 \* 4 + 4);

\*(p + 5 \* 4 + 4) = k;

px++;

printf("now:\n");

for (i = 0; i <= 24; i++)

{

printf("%3d", a[i]);

if (i % 5 == 4)putchar('\n');

}

}

void T11paixu(char ch[10][20])

{

int i, j, k, t = 0;

char temp[20];

for (k = 0; k < 9; k++)

for (i = 0, j = 0; i < 9 - k; i++)

{

while (ch[i][j] != '\0')

{

if (ch[i][j] < ch[i + 1][j])

{

t = 1;

break;

}

else if (ch[i][j] == ch[i + 1][j]) j++;

else if (ch[i][j] > ch[i + 1][j])

{

t = 0; break;

}

}

if (t == 1)

{

strcpy\_s(temp, ch[i]);

strcpy\_s(ch[i], ch[i + 1]);

strcpy\_s(ch[i + 1], temp);

}

}

for (i = 0; i <= 9; i++)printf("%s\n", ch[i]);

}

void T11()

{

char st[10][20] = { "china","hello","happy","goody","yeahy","peach","hardy","gauss","firma","comma" };

int i;

T11paixu(st);

}

void T16()

{

char ch[100] = "A123x456 17960?302tab4396";

int j=0, i=0,k,m,e,d,nd=0, a[50] = { 0 },\*pi;

char\* p = ch;

pi = a;

while(\*(p+i) != '\0')

{

if (\*(p+i) < 48 && \*(p+i) > 57)j++;

else

{

if (j > 0)

{

d = \*(p + i - 1) - 48;

k = 1;

while (k < j)

{

e = 1;

for (m = 1; m <= k; m++)

e \*= 10;

d += (\*(p + i - 1 - k) - 48) \* e;

k++;

}

\*pi = d;

nd++, pi++;

j = 0;

}

}

i++;

}

if (j > 0)

{

d = \*(p + i - 1) - 48;

k = 1;

while (k < j)

{

e = 1;

for (m = 1; m <= k; m++)

e \*= 10;

d += (\*(p + i - 1 - k) - 48) \* e;

k++;

}

\*pi = d;

nd++, pi++;

j = 0;

}

for (i = 0; i < nd; i++)printf("%d ",a[i]);

}

void T18()

{

char\* month[12] = { "January","February","March","April","May","June","July","August","September","October","November","December" };

int n;

printf("input month:\n");

scanf\_s("%d", &n);

printf("It is %s.\n", \*(month));

}

int main()

{

int a[9] = { 1,2,3,4,5,6,7,8,9 };

int b[25], i,t;

for (i = 0; i <= 24; i++)b[i] = i + 1;

printf("input a intenger\n");

scanf\_s("%d",&t);

while(t)

switch (t)

{

case 9: T9(a); scanf\_s("%d", &t); break;

case 10:T10(b); scanf\_s("%d", &t); break;

case 11:T11(); scanf\_s("%d", &t); break;

case 16:T16(); scanf\_s("%d", &t); break;

case 18:T18();scanf\_s("%d",&t);break;

}

}