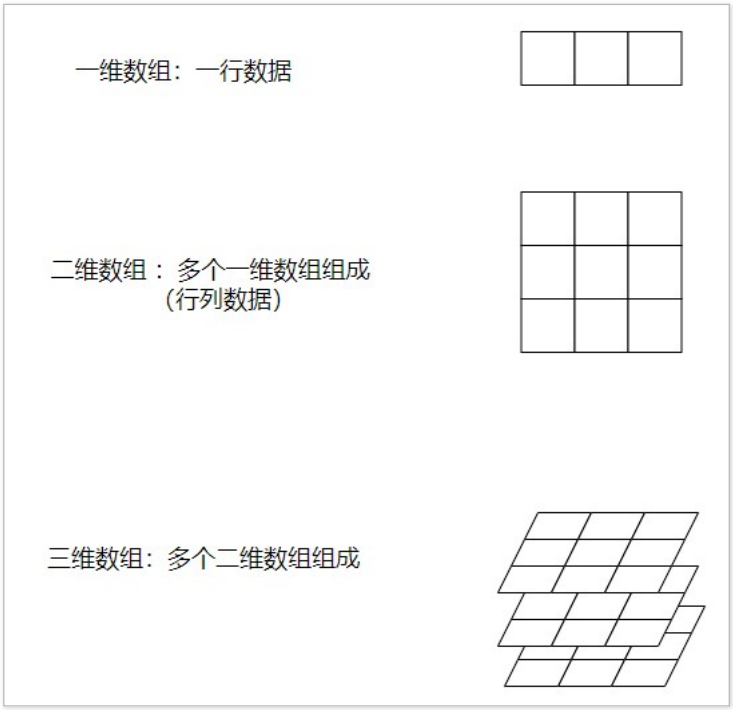
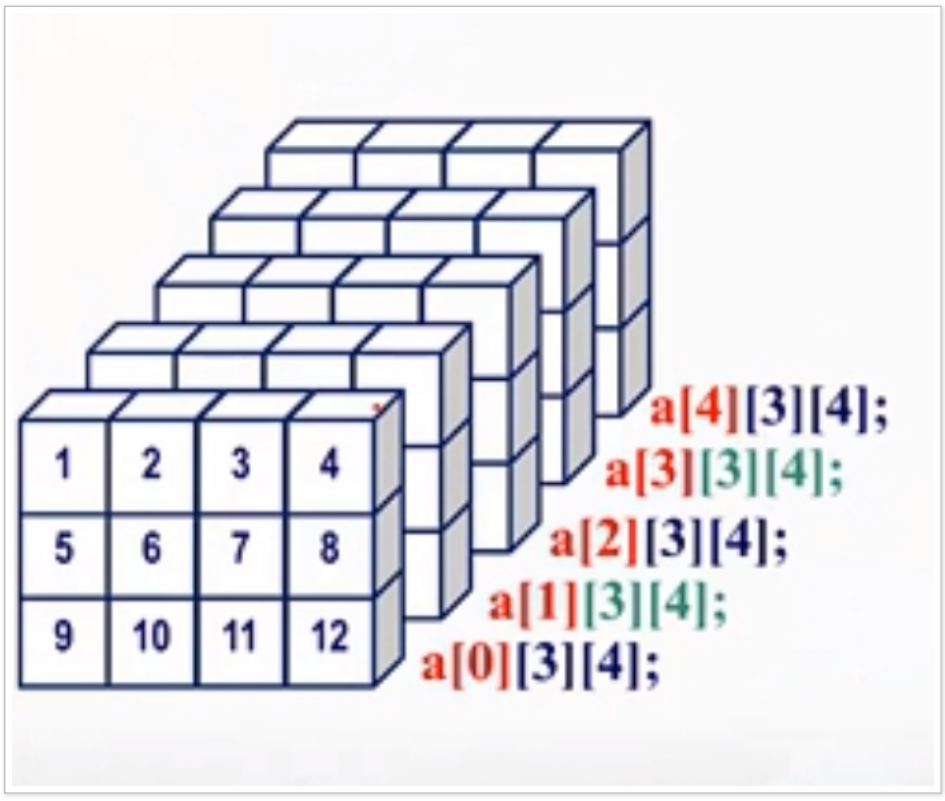
2.3 俄罗斯方块数据存储_物联网 / 嵌入式工程师 - 慕课网

> 慕课网慕课教程 2.3 俄罗斯方块数据存储涵盖海量编程基础技术教程，以图文图表的形式，把晦涩难懂的编程专业用语，以通俗易懂的方式呈现给用户。

3. 俄罗斯方块数据存储





```
int shape[7][4][18];
```

```
int shape[7][4][18] =
{
    {
            {1,1,0,0, 1,1,0,0, 0,0,0,0, 0,0,0,0, 2,2},
            {1,1,0,0, 1,1,0,0, 0,0,0,0, 0,0,0,0, 2,2},
            {1,1,0,0, 1,1,0,0, 0,0,0,0, 0,0,0,0, 2,2},
            {1,1,0,0, 1,1,0,0, 0,0,0,0, 0,0,0,0, 2,2},
    },
    {
            {1,0,0,0, 1,0,0,0, 1,0,0,0, 1,0,0,0, 3,0},
            {1,1,1,1, 0,0,0,0, 0,0,0,0, 0,0,0,0, 0,3},
            {1,0,0,0, 1,0,0,0, 1,0,0,0, 1,0,0,0, 3,0},
            {1,1,1,1, 0,0,0,0, 0,0,0,0, 0,0,0,0, 0,3},
    },
    {
            {0,1,0,0, 1,1,1,0, 0,0,0,0, 0,0,0,0, 1,2},
            {1,0,0,0, 1,1,0,0, 1,0,0,0, 0,0,0,0, 2,1},
            {1,1,1,0, 0,1,0,0, 0,0,0,0, 0,0,0,0, 1,2},
            {0,1,0,0, 1,1,0,0, 0,1,0,0, 0,0,0,0, 2,1}
    },
    {
            {1,1,0,0, 0,1,1,0, 0,0,0,0, 0,0,0,0, 1,2},
            {0,1,0,0, 1,1,0,0, 1,0,0,0, 0,0,0,0, 2,1},
            {1,1,0,0, 0,1,1,0, 0,0,0,0, 0,0,0,0, 1,2},
            {0,1,0,0, 1,1,0,0, 1,0,0,0, 0,0,0,0, 2,1},
    },
    {
            {0,1,1,0, 1,1,0,0, 0,0,0,0, 0,0,0,0, 1,2},
            {1,0,0,0, 1,1,0,0, 0,1,0,0, 0,0,0,0, 2,1},
            {0,1,1,0, 1,1,0,0, 0,0,0,0, 0,0,0,0, 1,2},
            {1,0,0,0, 1,1,0,0, 0,1,0,0, 0,0,0,0, 2,1},
    },
    {
            {0,0,1,0, 1,1,1,0, 0,0,0,0, 0,0,0,0, 1,2},
            {1,0,0,0, 1,0,0,0, 1,1,0,0, 0,0,0,0, 2,1},
            {1,1,1,0, 1,0,0,0, 0,0,0,0, 0,0,0,0, 1,2},
            {1,1,0,0, 0,1,0,0, 0,1,0,0, 0,0,0,0, 2,1}
    },
    {
            {1,0,0,0, 1,1,1,0, 0,0,0,0, 0,0,0,0, 1,2},
            {1,1,0,0, 1,0,0,0, 1,0,0,0, 0,0,0,0, 2,1},
            {1,1,1,0, 0,0,1,0, 0,0,0,0, 0,0,0,0, 1,2},
            {0,1,0,0, 0,1,0,0, 1,1,0,0, 0,0,0,0, 2,1}},
};
```

print.c

```
#include <stdio.h>
#include <sys/time.h>
#include <stdlib.h>
#include <signal.h>
```

```
int shape[7][4][18] =
{
        {
                {1,1,0,0, 1,1,0,0, 0,0,0,0, 0,0,0,0, 2,2},
                {1,1,0,0, 1,1,0,0, 0,0,0,0, 0,0,0,0, 2,2},
                {1,1,0,0, 1,1,0,0, 0,0,0,0, 0,0,0,0, 2,2},
                {1,1,0,0, 1,1,0,0, 0,0,0,0, 0,0,0,0, 2,2},
        },
        {
                {1,0,0,0, 1,0,0,0, 1,0,0,0, 1,0,0,0, 3,0},
                {1,1,1,1, 0,0,0,0, 0,0,0,0, 0,0,0,0, 0,3},
                {1,0,0,0, 1,0,0,0, 1,0,0,0, 1,0,0,0, 3,0},
                {1,1,1,1, 0,0,0,0, 0,0,0,0, 0,0,0,0, 0,3},
        },
        {
                {0,1,0,0, 1,1,1,0, 0,0,0,0, 0,0,0,0, 1,2},
                {1,0,0,0, 1,1,0,0, 1,0,0,0, 0,0,0,0, 2,1},
                {1,1,1,0, 0,1,0,0, 0,0,0,0, 0,0,0,0, 1,2},
                {0,1,0,0, 1,1,0,0, 0,1,0,0, 0,0,0,0, 2,1}
        },
```

```
                {
                        {1,1,0,0, 0,1,1,0, 0,0,0,0, 0,0,0,0, 1,2},
                        {0,1,0,0, 1,1,0,0, 1,0,0,0, 0,0,0,0, 2,1},
                        {1,1,0,0, 0,1,1,0, 0,0,0,0, 0,0,0,0, 1,2},
                        {0,1,0,0, 1,1,0,0, 1,0,0,0, 0,0,0,0, 2,1},
                },
                {
                        {0,1,1,0, 1,1,0,0, 0,0,0,0, 0,0,0,0, 1,2},
                        {1,0,0,0, 1,1,0,0, 0,1,0,0, 0,0,0,0, 2,1},
                        {0,1,1,0, 1,1,0,0, 0,0,0,0, 0,0,0,0, 1,2},
                        {1,0,0,0, 1,1,0,0, 0,1,0,0, 0,0,0,0, 2,1},
                },
                {
                        {0,0,1,0, 1,1,1,0, 0,0,0,0, 0,0,0,0, 1,2},
                        {1,0,0,0, 1,0,0,0, 1,1,0,0, 0,0,0,0, 2,1},
                        {1,1,1,0, 1,0,0,0, 0,0,0,0, 0,0,0,0, 1,2},
                        {1,1,0,0, 0,1,0,0, 0,1,0,0, 0,0,0,0, 2,1}
                },
                {
                        {1,0,0,0, 1,1,1,0, 0,0,0,0, 0,0,0,0, 1,2},
                        {1,1,0,0, 1,0,0,0, 1,0,0,0, 0,0,0,0, 2,1},
                        {1,1,1,0, 0,0,1,0, 0,0,0,0, 0,0,0,0, 1,2},
                        {0,1,0,0, 0,1,0,0, 1,1,0,0, 0,0,0,0, 2,1}},
};
```

```
void print_mode_shape(int n,int m,int x,int y,int c)
{
        int i = 0;
        int xx = x;
        int yy = y;
        for(i = 0;i < 16;i++)
        {

                if(i != 0 && i%4 == 0)
                {
                        yy += 1;
                        xx = x;
                }

                if(shape[n][m][i] == 1)
                {

                        printf("\033[%d;%dH",yy,xx);

                        printf("\033[%dm[]",c);

                        printf("\033[0m");
                }

                xx += 2;
        }
}
```

main.c

```
int main()
{

        printf("\033[2J");
        int x = 6;
        int y = 6,k = 0;
        int i = 0;
        for(k = 0;k < 7;k++)
        {
                for(i = 0;i < 4;i++)
                {
                        print_mode_shape(k,i,x,y,43);
                        x = x + 12;
                }
                x = 6;
                y = y + 4;
                printf("\n");
                getchar();
        }
        printf("\33[?25h");
    return 0;
}
```

全文完