

```
#include <stdio.h>
```

```
int main {
```

```
    int h, t, c, r, b=0
```

```
    while (b==0) {
```

```
        printf("请输入头的数量");
```

```
        scanf("%d", &h);
```

```
        printf("请输入脚的数量");
```

```
        scanf("%d", &t);
```

```
        if (h!=0 || t!=0) {
```

```
            for (c=0, c<=h, c++);
```

```
                r = h - c;
```

```
                if (2c + 4r == t)
```

```
                    break;
```

```
            if (t > 4h || t < 2h || t <= 0)
```

```
                printf("输入数量有误, 请重新输入");
```

```
            else
```

```
                printf("鸡的数量为%d \n 兔的数量为%d", c, r);
```

```
        }
```

```
    else
```

```
        b = 1;
```

```
}
```

```
return 0;
```

```
}
```

1.

```
#include <stdio.h>
```

```
int main () {
```

```
    int a[20], y;
```

```
    for (y=0, y<20, y++) {
```

```
        if (y==0)
```

```
            a[y]=2
```

```
        else if (y<3)
```

```
            a[y]=a[y-1]+1;
```

```
        else
```

```
            a[y]=2*a[y-3]+3;
```

```
        printf("第%d年牛的数量为%d", y+1, a[y]);
```

```
    return 0;
```

```
}
```

2.

```
#include <stdio.h>
```

```
int main() {
```

```
    int a[10];
```

```
    int i, sum = 0, max, min;
```

```
    float ave;
```

```
    for (i = 0, i < 10, i++) {
```

```
        printf("请输入第%d个整数\n", i+1);
```

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

```
        sum += a[i];
```

```
        if (i == 0) {
```

```
            max = a[0];
```

```
            min = a[0];
```

```
        }
```

```
        if (a[i] > max)
```

```
            max = a[i];
```

```
        if (a[i] < min)
```

```
            min = a[i];
```

```
    }
```

```
    ave = sum / 10;
```

```
    printf("总和是%d\n平均值是%f\n最大值是%d\n最小值是%d\n",
```

```
           sum, ave, max, min);
```

```
    return 0;
```

```
}
```

3.

```
#include <stdio.h>
```

```
int main () {
```

```
    int a[9];
```

```
    int a, s=0, i, j, b=0;
```

```
    for (a[0]=1; a[0]<10; a[0]++) {
```

```
        for (a[1]=0; a[1]<10; a[1]++) {
```

```
            for (a[2]=0; a[2]<10; a[2]++) {
```

```
                for (a[3]=0; a[3]<10; a[3]++) {
```

```
                    for (a[4]=0; a[4]<10; a[4]++) {
```

```
                        for (a[5]=0; a[5]<10; a[5]++) {
```

```
                            for (a[6]=0; a[6]<10; a[6]++) {
```

```
                                for (a[7]=0; a[7]<10; a[7]++) {
```

```
                                    for (a[8]=0; a[8]<10; a[8]++) {
```

```
                                        a = (10*a[0] + a[1]) * (100*a[2] + 10*a[3] + a[4])
```

```
                                            == (1000*a[5] + 100*a[6] + 10*a[7] + a[8]);
```

```
                                for (i=0; i<9; i++) {
```

```
                                    for (j=0; j<9; j++) {
```

```
                                        if (i!=j && data[i] == data[j])
```

```
                                            b=b+1;
```

```
                                    }
```

```
                                }
```

```
                            if (b==0 && a==1)
```

```
                                s+=1;
```

```
    }  
    }  
    }  
    }  
    }  
    }  
    }  
    }  
    }  
    }
```

```
printf("共有%d种情况", s);  
return 0;
```

```
}
```