**1.**

**#include<stdio.h>**

**void tri(char a[300][300],int N)**

**{ int i,j;**

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

**{**

**a[i][0]='\*';**

**a[i][i]='\*';**

**}**

**for(j=0;j<N;j++)**

**a[N-1][j]='\*';**

**}**

**void main()**

**{ int n,i,j;**

**char a[300][300];**

**printf("请输入一个正整数n:");**

**scanf("%d",&n);**

**printf("用星号字符绘制的边长为%d的空心三角形图案如下：\n",n);**

**tri(a,n);**

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

**{ for(j=0;j<n;j++)**

**printf("%3c",a[i][j]);**

**printf("\n");**

**}**

**printf("\n");**

**}**

**2.**

**#include<stdio.h>**

**#include<stdlib.h>**

**#include<time.h>**

**void main()**

**{ int x,y,n,k,answer;**

**srand(time(NULL));**

**printf("这是一个乘法小游戏，输入1/2选择一/两位数乘法小游戏(回答为0表示游戏结束)：");**

**scanf("%d",&n);**

**while(n==1)**

**{x=1+rand()%9;**

**y=1+rand()%9;**

**k=1+rand()%3;**

**printf("\n%d \* %d = ",x,y);**

**scanf("%d",&answer);**

**if(answer==0) return;**

**while(1)**

**if(x\*y==answer)**

**{**

**if(k==1) printf("Very good!");**

**if(k==2) printf("Excellent!");**

**if(k==3) printf("Keep up the good work!");**

**break;**

**}**

**else**

**{ if(k==1) printf("No.Please try again:");**

**if(k==2) printf("Wrong.Try once more:");**

**if(k==3) printf("No.Keep trying:");**

**fflush(stdin);**

**scanf("%d",&answer);**

**if(answer==0) return;**

**}**

**}**

**while(n==2)**

**{x=10+rand()%90;**

**y=10+rand()%90;**

**k=1+rand()%3;**

**printf("\n%d \* %d = ",x,y);**

**scanf("%d",&answer);**

**if(answer==0) return;**

**while(1)**

**if(x\*y==answer)**

**{**

**if(k==1) printf("Very good!");**

**if(k==2) printf("Excellent!");**

**if(k==3) printf("Keep up the good work!");**

**break;**

**}**

**else**

**{ if(k==1) printf("No.Please try again:");**

**if(k==2) printf("Wrong.Try once more:");**

**if(k==3) printf("No.Keep trying:");**

**fflush(stdin);**

**scanf("%d",&answer);**

**if(answer==0) return;**

**}**

**}**

**printf("\n");**

**}**

**3.**

**#include<stdio.h>**

**#include<stdlib.h>**

**#include<time.h>**

**void main()**

**{ int x,max,min,answer;**

**srand(time(NULL));**

**printf("这是一个猜数小游戏，请你给出想猜范围的最小值和最大值（注意：本程序所涉及的均为正整数 回答为0表示程序结束）：");**

**scanf("%d",&min);**

**scanf("%d",&max);**

**while(1)**

**{**

**x=min+rand()%(max-min+1);**

**printf("请输入你所猜的属于该范围的一个正整数：");**

**scanf("%d",&answer);**

**if(answer==0) return;**

**while(1)**

**if(x==answer)**

**{**

**printf("回答正确\n");**

**break;**

**}**

**else**

**{**

**if(x>answer)printf("很遗憾，未猜中！猜得太小");**

**if(x<answer)printf("很遗憾，未猜中！猜得太大");**

**scanf("%d",&answer);**

**if(answer==0) return;**

**}**

**}**

**printf("\n");**

**}**

**5.** **#include<stdio.h>**

**long int sumsecond(int hour,int minute,int second)**

**{ int m;**

**if((hour>=0&&hour<=24)&&(minute>=0&&minute<=60)&&(second>=0&&second<=60))**

**m=hour\*3600+minute\*60+second;**

**return m;**

**return 0;**

**}**

**void main()**

**{ int a,b,c,m,n,k,M;**

**printf("请按时间先后顺序输入同一天的两个时间：\n");**

**scanf("%d",&a);**

**scanf("%d",&b);**

**scanf("%d",&c);**

**scanf("%d",&m);**

**scanf("%d",&n);**

**scanf("%d",&k);**

**M=sumsecond(m,n,k)-sumsecond(a,b,c);**

**printf("同一天的这两个时间之间的秒数为：%d",M);**

**printf("\n");**

**}**

**10.**

**void fun()**

**{**

**static int times=0;**

**times++;**

**printf("fun函数已经被调用了%d次",times);**

**}**

**方案2：**

static int ttttttt = 0;

#define func1(x) { ttttttt++; func1(x);}

**14.**

**①**

**#define MAX(A,B,C)((A)>(B)?(A):(B))>((B)>(C)?(B):(C))?((A)>(B)?(A):(B)):((B)>(C)?(B):(C))②**

**#define MAX2(A,B)((A)>(B)?:(A):(B))**

**#define MAX3(A,B,C)MAX2(MAX2((A),(B)),(C))**