1. 求左列到第n項的和 $1+\frac{1}{2}+\frac{1}{6}+\frac{1}{12}+…=?$

int main()

{

 int n,i;

 float s;

 printf("Caculate 1+(1/2)+(1/6)+(1/12)+(1/20)+....=?\n");

 printf("Please enter the number n :\n");

 scanf("%d",&n);

 //每項為 (1/n)\*(1/(n+1))

 s=1;

 for(i=1;i<n;i=i+1)

 {

 s=s+(1.0/i)\*(1.0/(i+1));

 }

 printf("%f\n",s);

 //------------------------------

 // 因第一項非 1/(n-1)\*(1/n)，所以從第二項開始

 s=1;

 for(i=2;i<=n;i=i+1)

 {

 s=s+(1.0/(i-1))\*(1.0/i);

 }

 printf("%f\n",s);

 //

 printf("Caculate 1+(1/2)+(1/6)+(1/12)+(1/20)+....=?\n");

 return 0;

}

1. 請以迴圈for 印出n層如下圖形，X：表空白，數字表第幾層

1:Z

2:XZ

3:XXZ

4:XXXZ

5:XXXXZ

int main()

{

 int n,i,j;

 scanf("%d",&n); // 輸入 n

 for(i=1;i<=n;i=i+1)

 {

 for(j=1;j<i;j=j+1)

 {

 printf("%s","\_");

 }

 printf("%s\n","Z");

 }

 printf("\n\n");

 printf("第二種寫法\n");

 for(i=1;i<=n;i=i+1)

 {

 printf("%\*s\n",i,"Z");

 }

 printf("\n\n");

 return 0;

}

1. 求左列到第n項的和1+(2+3)+(3+4+5)+(4+5+6+7)+(5+6+7+8+9)+…..

int main()

{

 int n,i,j,s;

 printf("Caculate 1+(2+3)+(3+4+5)+(4+5+6+7)+(5+6+7+8+9)+…....=?\n");

 printf("Please enter the number n :\n");

 scanf("%d",&n);

 /\* 第n項, 從n開始, 2n-1結束 \*/

 s=0;

 for(i=1;i<=n;i=i+1)

 {

 printf("Item:");

 for(j=i;j<=2\*i-1;j=j+1)

 {

 printf("%d ",j);

 s=s+j;

 }

 printf("\n");

 }

 printf("The Sum is : %d",s);

 return 0;

}