**生产者-消费者的例子**

姓名：季博文 孔令辉 赵化龙

代码如下：

#include "windows.h"

#include "conio.h"

#include "stdio.h"

#include "time.h"

#define MAX 20

int count;

void Proclucer()

{

int k,a=0;

while(1)

{

if(count >= MAX)

{

printf("缓冲池已满!等待 2 秒!/n");

Sleep(1000);

}

else

{ k=rand();

if(k%2==0)

{

a++;

count++;

printf("生产了一个产品!当前产品的数量是: %d 生产产品总数:%d /n/n",count,a);

}

Sleep(600);

}

}

}

void Consumer()

{

int k,b=0;

while(1)

{

if(count <= 0)

{

printf("缓冲池已空!等待 2 秒!/n");

Sleep(1000);

}

else

{

k=rand();

if(k%2!=0)

{

b++;

count--;

printf("取出了一个产品!当前产品的数量是: %d 取出产品总数:%d /n/n",count,b);

}

Sleep(600);

}

}

}

int tStop()

{

getch();

return 11;

}

void Start()

{

int m;

HANDLE ahThread=CreateThread(NULL,0,(LPTHREAD\_START\_ROUTINE)Proclucer,NULL,0,NULL);

HANDLE bhThread=CreateThread(NULL,0,(LPTHREAD\_START\_ROUTINE)Consumer,NULL,0,NULL);

HANDLE hThread=CreateThread(NULL,0,(LPTHREAD\_START\_ROUTINE)tStop,NULL,0,NULL);

m=tStop();

if(m==11)

{

CloseHandle(ahThread);

CloseHandle(ahThread);

CloseHandle(hThread);

printf("/nClose Thread Success!/n");

}

}

void main()

{

Start();

printf("/n");

}

运行结果如下：

