[**最大矩阵连乘次数**](http://www.cnblogs.com/DiaoCow/archive/2010/04/16/1713862.html)

这题只不过把王晓东书上求最小连乘次数改为了求最大连乘次数，方法还是DP

状态转移方程：m[i][j] = Max(m[i][k] + m[k+1][j] + p[i-1]\*p[k]\*p[j])

#include <stdio.h>  
#define N 11  
  
int m[N][N] , p[N+1] , n;  
  
int MatrixChain()  
{  
 int r , i , j , k , t;  
  
 for(i = 1 ; i <= n ; i++) m[i][i] = 0;  
  
 for(r = 2 ; r <= n ; r++)  
 {  
 for(i = 1 ; i <= n - r + 1 ; i++)  
 {  
 j = i + r - 1;  
 m[i][j] = m[i+1][j] + p[i-1] \* p[i] \* p[j];  
  
 for(k = i + 1 ; k < j ; k++)  
 {  
 t = m[i][k] + m[k+1][j] + p[i-1] \* p[k] \* p[j];  
 m[i][j] = t < m[i][j] ? m[i][j] : t;  
 }  
 }  
 }  
 return m[1][n];  
}  
  
int main(void)  
{  
 int z , i;  
  
 scanf("%d", &z);  
 while(z-- > 0)  
 {  
 scanf("%d", &n);  
 for(i = 0 ; i <= n ; i++)  
 scanf("%d", p + i);  
  
 printf("%d\n", MatrixChain());  
 }  
 return 0;  
}