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PROG: trt

LANG: C++

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#include <stdio.h>

int n;

int v[2001];

int d[2001][2001];

void read()

{

int i;

scanf("%d", &n);

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

scanf("%d", v+i);

}

void build()

{

int i;

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

d[i][i] = v[i]\*n;

}

int solve()

{

int i, k, l, j;

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

for (k = 0, l = i; l < n; k++, l++)

if (d[k+1][l]+v[k]\*(n-l+k) > d[k][l-1]+v[l]\*(n-l+k))

d[k][l] = d[k+1][l]+v[k]\*(n-l+k);

else

d[k][l] = d[k][l-1]+v[l]\*(n-l+k);

return d[0][n-1];

}

int main()

{

freopen("trt.in", "r", stdin);

freopen("trt.out", "w", stdout);

read();

build();

printf("%d\n", solve());

return 0;

}