#include <stdio.h>

#include <string.h>

int s[2][3010], m[2], sw;

void mul(int p)

{

int d, l, i, j;

memset(s[sw^1], 0, sizeof(s[sw^1]));

for (i = 0; i < m[sw]; i++)

for (d = s[sw][i]\*p, j = i; d; j++)

{

l = s[sw^1][j];

s[sw^1][j] = (l+d)%10;

d = (l+d)/10;

if (m[sw^1] <= j)

m[sw^1] = j+1;

}

}

int main()

{

int n, i, j;

scanf("%d", &n);

sw = 0;

m[sw] = 1;

s[sw][0] = 1;

for (i = 3; i <= n; i++)

{

mul(i-2);

sw ^= 1;

for (j = 0; s[sw][j] == 9; j++)

s[sw][j] = 0;

s[sw][j]++;

}

for (i = m[sw]-1; i >= 0; i--)

printf("%d", s[sw][i]);

putchar('\n');

return 0;

}