

Python Code

```
1 import torch
2 D, C = 40000, 10
3 m1 = torch.randn(C, D, 2).cuda()
4 model = torch.nn.ConvTranspose2d(
    C, 2, kernel_size=(1, 1),
    stride=(200, 200)).cuda()
5 model(m1)
```

CUDA Code

```
1 // C++ Code at::native::::slow_conv_transpose2d
2 int64_t n_elements_64 = calculate_total_elements(...);
3 int n_elements_32 = (int)n_elements_64; // Integer Overflow
4 dim3 grid = calculate_grid(n_elements_32);
5 col2im_kernel<<<grid, block, ...>>>(...);

6 // CUDA Device Code at::native::col2im_kernel
7 __global__ void col2im_kernel(..., float*output)
8 {
9     int64_t index = blockIdx.x * blockDim.x + threadIdx.x;
10    output[index] = ...; // Accessing invalid memory
```