Nim Game

由题意分析“我先下”可得如下表：

|  |  |  |  |
| --- | --- | --- | --- |
| heaps | takes | remain | Win or lose |
| 1 | 1 | 0 | win |
| 2 | 2 | 0 | win |
| 3 | 3 | 0 | win |
| 4 | 1~3 | 3~1 | lose |
| 5 | 1 | 4(相当于这次他先拿) | win |
| 6 | 2 | 4 | win |
| 7 | 3 | 4 | win |
| 8 | 1~3 | 7~5(相当于这次他先) | lose |
| 9 | 1 | 8 | win |
| ... |  |  |  |

由表可知，只要每次能剩下4的倍数的石子，我就输了

代码如下：

bool canWinNim(int n) {

if(n%4==0){

return false;

}

return true;

}