

TASK: - Find number of grains for each square  
 - Find the total number of grains

Variables:

```
long long totalGrains
int I
long long grain-Square
```

Calculations:

To get total amount of grains:

$$\text{total} = \text{total} + 2^{I-1}$$

To get # of grains per square

$$\text{grain-Square} = 2^{I-1}$$

Iterations:

Use for loop that repeats 64 times

Output:

For # of grains for each square:

For each iteration:

print I, which represents the # of boards, and print out grain-Square

For total amount of grains:

For each iteration:

calculate total, then print total outside of the loop.