

$\%f$

$\%.2f$

User inputs integers,  
output <sup># of</sup> even or odd.

Top down design  
stepwise refinement

- Step 1
1. set up program
  2. read numbers, count evens and odds.
  3. print results

1. create Scanner  
declare variables  
int number  
// user input  
int numEvens = 0  
int numOdds = 0  
int total  
int count

2.  
a. ask for number of numbers  
b. go: 1... total ← while  
→ ask user for number  
→ check even or odd  
if (number % 2 == 0)  
add 1 to numEvens  
or numOdds

CountEvens.java

```

while( ) {
    if( ) {
        ...
    }
}

```

nested

```
count=1;
while (count <= total) {
    s.o.pln("Enter #");
    number = in.nextInt();
    if (number % 2 == 0) {
        numEvens++;
    }
    else {
        numOdds++;
    }
}
s.opf("%d odds, %d evens\n", numOdds,
numEvens);
```

