89. Gray Code



```
♀ Hints (/problems/gray-code/hints/)

Description (/problems/gray-code/description/)
                                                                          🗗 Share
                                                                                                      Subscribe
                                                                                                               ▲ Report
An accepted three line solution in JAVA
                                                                                                    (/jinrf) jinrf (/jinrf)
      Last Edit: 9 hours ago
181
       public List<Integer> grayCode(int n) {
           List<Integer> result = new LinkedList<>();
           for (int i = 0; i < 1<<n; i++) result.add(i ^ i>>1);
           return result;
       }
      The idea is simple. G(i) = i^{(i/2)}.
```

-

Comments: 23





```
000 000 -> 000

001 000 -> 001

010 001 -> 011

011 001 -> 010

100 010 -> 110

101 010 -> 111

110 011 -> 101

111 011 -> 100
```



varunu28 (/varunu28) ★1 ② January 25, 2018 4:22 PM

A much basic and detailed solution using a base case of 1. We start with a list of value 1 and build up the list till n