class Result {

/\*

\* Complete the 'fibonacci' function below.

\*

\* The function is expected to return an INTEGER\_ARRAY.

\* The function accepts INTEGER n as parameter.

\*/

public static List<Integer> fibonacci(int n) {

// Write your code here

if (n < 0) {

throw new IllegalArgumentException("n must not be less than zero");

}

if (n == 0) {

return new ArrayList<>();

}

if (n == 1) {

return Arrays.asList(0);

}

if (n == 2) {

return Arrays.asList(0, 1);

}

final List<Integer> seq = new ArrayList<>(n);

seq.add(0);

n = n - 1;

seq.add(1);

n = n - 1;

while (n > 0) {

int a = seq.get(seq.size() - 1);

int b = seq.get(seq.size() - 2);

seq.add(a + b);

n = n - 1;

}

return seq;

}

}