

# Algorithm to find the longest run of ones in a given binary sequence

## Algorithm:

Step 1: Initialize **number** with random integer

Step 2: get binary equivalent of the **number** in string format and store in **sequence**

Step 3: call procedure **longRunOfones**, pass bin and get the value returned in **result**

Step 4: display **result**

Procedure longRunOfones(a)

**Size** = length of a

    Declare **run** as list

    Initialize **runs** as 0 to keep track of the longest run found in continuous sequence of 1s.

    For  $i \leftarrow 0$  to **size**:

        If  $a[i] == '1'$  :

**runs** = **runs** + 1

        else:

**run.append(runs)**

**runs** = 0

    return max value from **runs** list