Easy Exercise – ISBN

# Description

ISBN's (International Standard Book Numbers) are identifiers for books.

The ISBN is a thirteen-digit code.

The last digit is a check number calculated as follows:

* The first 12 digits are taken
* Starting at index 1, if the index is odd - add it, and if the index is even – multiply the digit by three then add it.
* From the sum find the remainder after dividing by 10.
* 10 minus the remainder give us the check digit
* In other words the following algebra would give us the check digit:

( 10 – (( x1 + 3x2 + x3 + 3x4 + x5 + 3x6 + x7 + 3x8 + x9 + 3x10 + x11 + 3x12 ) % 10))

For ISBN: 978-0-306-40615-? The following check would happen:

* 9 + 3\*7 + 8 + 3\*0 + 3 + 3\*0 + 6 + 3\*4 + 0 + 3\*6 + 1 + 3\*5 = 93
* 93 % 10 = 3
* 10-3=7

# Example