

The Caesar Cypher

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January 31, 2019

Caesar Cipher

Example of string encoding with constant shift factor of 3 ...

- "abc " would be encoded to "def"
- "haskell is fun" would be encoded to "kdnnhoo lv ixq"

More Generally

So, more generally with a shift factor of 4, for example:

"abc" would be encoded by "efg"

How will we use Haskell to implement the Caesar and more ...

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Encoding and decoding

The third section

The fourth section

The fifth section

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Encoding and Decoding

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import Data.Char    -- imports standard functions
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For simplicity, we will only encode the lower-case characters within a string and leave the other characters unchanged.

Firstly

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let2Int :: Char -> Int
let2Int c = ord c - ord 'a'
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int2Let :: Int -> Char
int2Let n = chr (ord 'a' + n)
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Second section, second frame with two overlays.

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- The first item...
- ... and the second one.

Second section, second frame with two overlays.

- The first item...
- ... and the second one.

Third section, first and only frame with two overlays.

- The first item...
- ... and the second one.

Third section, first and only frame with two overlays.

- The first item...
- ... and the second one.

Fourth section, first and only frame with two overlays.

- The first item...
- ... and the second one.

Fourth section, first and only frame with two overlays.

- The first item...
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Fifth section, first and only frame with three overlays.

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- 1 There are five sections altogether.
- 2 With a total of 7 frames (pages in handout mode).
- 3 And 14 overlays (pages in presentation mode).

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