

# Atbash Cipher in Scala

[Readme \(readme\)](#)[Test Suite \(../atbash-cipher\)](#)

## Atbash Cipher

Create an implementation of the atbash cipher, an ancient encryption system created in the Middle East.

The Atbash cipher is a simple substitution cipher that relies on transposing all the letters in the alphabet such that the resulting alphabet is backwards. The first letter is replaced with the last letter, the second with the second-last, and so on.

An Atbash cipher for the Latin alphabet would be as follows:

```
1 Plain:  abcdefghijklmnopqrstuvwxyz
2 Cipher: zyxwvutsrqponmlkjihgfedcba
```

It is a very weak cipher because it only has one possible key, and it is a simple monoalphabetic substitution cipher. However, this may not have been an issue in the cipher's time.

Ciphertext is written out in groups of fixed length, the traditional group size being 5 letters, and punctuation is excluded. This is to make it harder to guess things based on word boundaries.

## Examples

- Encoding test gives gvhg
- Decoding gvhg gives test
- Decoding gsvjf rpxyi ldmul cqfnk hlevi gsvoz abwlt gives The quick brown fox jumps over the lazy dog.

The Scala exercises assume an SBT project scheme. The exercise solution source should be placed within the exercise directory/src/main/scala. The exercise unit tests can be found within the exercise directory/src/test/scala.

To run the tests simply run the command `sbt test` in the exercise directory.

For more detailed info about the Scala track see the help page (<http://help.exercism.io/getting-started-with-scala.html>).

# Source

Wikipedia view source (<http://en.wikipedia.org/wiki/Atbash>)

# exercism.io

(/)

Beta

---

[About \(/about\)](#) - [Donate \(/donate\)](#)

 [GitHub \(https://github.com/exercism/exercism.io\)](https://github.com/exercism/exercism.io)  [Twitter \(https://twitter.com/exercism\\_io\)](https://twitter.com/exercism_io)

 [Newsletter \(https://tinyletter.com/exercism\)](https://tinyletter.com/exercism)

## SPONSORS



<https://bugsnag.com/blog/bugsnag-loves-open-source>



<http://www.rackspace.com/>



<http://www.shopify.com/>

© 2015 Katrina Owen