Cracking!

# Brute force and/or heuristic attack on number

Crack these 4-digit numerical passwords (hashed).

81dc9bdb52d04dc20036dbd8313ed055

43dd49b4fdb9bede653e94468ff8df1e

4a7d1ed414474e4033ac29ccb8653d9b

b26747fc8cb2170baa866b315cf58b7c

To crack them quicker it might help to write an algorithm (hint: you can pad an integer and add leading zeroes like this:

number = 6

attempt = pad\_to\_4\_digits(number)

hash(attempt)

Write an algorithm to crack them systematically below, or code it if you’ve got some Python skills or your partner has…

# Cracking strings

## 4 Characters

**Create** a password that is 4 characters long (lower case alphabetic) and hash it using the hasher.

Write down the hash digest on a post-it note and share with another student.

Try to crack each other's passwords!

Try to crack my 4-character lower-case password:

570a90bfbf8c7eab5dc5d4e26832d5b1

# Dave’s Brother’s Passwords

0d107d09f5bbe40cade3de5c71e9e9b7

0409ee1a3f104ce0c18bdcc6642c5800

88c69faf27ef6f90ac675d9a594860eb

5f4dcc3b5aa765d61d8327deb882cf99

7c6a180b36896a0a8c02787eeafb0e4c

# How is Dave feeling today?

(Background info, my sister is getting married on Saturday and my fridge has broken and I’m in charge of the drink!)

7b849a50da92f39d6af294b10e0b93f5

1306928e5c057f2e10ecbbcab72a293a

e41a4ab90fbfaa5d904f90222c929d3c

Email Dave with your answers, or with any questions about CompSci A-level at Ludlow: [edwardsd@hlcollege.ac.uk](mailto:edwardsd@hlcollege.ac.uk)