

# A Crossword Puzzle

This challenge can be solved using any programming language.

Remember:

- Show case your computer science knowledge, coding skill & attention to details
- The most important thing is to have a completed, working & correct implementation first
- If possible reduce space & time complexity

The following resources are allowed:

- Wikipedia
- Programming Language documentation
- Coding tutorial
- Books
- Inclusion (within the solution) external libraries. However, be prepare to defend your decision

The following resources are NOT allowed:

- The help of another person
- The help of an AI program (unless you wrote the AI from scratch to solve this problem)
- Solutions (or partial solutions) found online or in printed materials that is solved by someone else

## Overview

Write a function name: *CrossWord* that takes two string inputs and return a single string result.

Each input is expected to be a single word:

- Consisting of only letters a-z

The method attempts to:

- Locate the *earliest* possible intersection of characters between the two words &
- Crosses both words on the above intersection
- The first word is to be rendered horizontally; while the second, vertically
- The results are returned as a single string

## Input & Output Examples

cat & hat:

```
h
cat
t
```

balloon & bat

```
balloon
a
t
```

faint & test

faint  
e  
s  
t

road & dad

d  
road  
d

dad & road

r  
o  
dad  
d