

# Tuples

No.	Title	Description	Completed	Play
1	Tuple: Declaration and Initialisation	Tuple is like list, except that it is immutable.	✓	▶
2	Tuple: Declaration and Initialisation	Tuple is like list, except that it is immutable. However, the elements in a tuple can be mutable.	✓	▶
3	Determinant of a Matrix	The determinant of a 2x2 matrix is the product of the elements on the main diagonal minus the product of the elements off the main diagonal.	✓	▶
4	Same Contents	Write a function hasSameContent(t1, t2) that takes in two tuples as arguments and return True if both tuples contain the same items.	✓	▶
5	Sum Numbers	<div>In python, it is possible to pass in variable-length argument to a function by using the following notation: *args. The argument is passed in as a tuple.<pre>def funA(*args):     print type(args)     print args  &gt;&gt;&gt; funA(1, 3, 5) &lt;type 'tuple'&gt; (1, 3, 5)  &gt;&gt;&gt; funA('a', 'b', 'c', 'd') &lt;type 'tuple'&gt; ( 'a', 'b', 'c', 'd')</pre></div> <div>Write a function sumNumbers(*args) that takes in a variable-length argument list of numbers and returns the sum of the numbers.</div>	✓	▶
6	Common Elements	Write a function commonElements(t1, t2) that takes in 2 tuples as arguments and returns a sorted tuple containing elements that are found in both tuples.	✓	▶
7	Remove Common Elements	Write a function removeCommonElements(t1, t2) that takes in 2 tuples as arguments and returns a sorted tuple containing elements that are <b>not</b> found in both tuples.	✓	▶
8	Shift By Two	Write a function shiftByTwo(*args) that takes in variable-length argument and returns a tuple with its elements shifted to the right by two indices. See samples given below.	✓	▶
9	Sort by Index	Write a function sortByIndex(aList) that takes in a list of tuple in the following format: (index, value) and returns a new tuple with its elements sorted based on the index.	✓	▶
10	Sort by Length	Write a function sortByLength(t, order) that takes in a tuple of string and returns a new tuple with its elements sorted by the length of the string. The order of sorting is based on the value of the second argument: 'asc' or 'des'.	✓	▶