## Lösung zu Aufgabe 1

```python
def merge_dictionaries(dict_1, dict_2):
    result = dict(dict_1)  # copy the first dictionary
    for key, value in dict_2.items():
        result[key] = value
    return result
```

## Lösung zu Aufgabe 2

```python
def reverse_string(word):
    return word[::-1]
```

## Lösung zu Aufgabe 3

```python
def is_palindrome(word):
    word = word.lower()
    return word == word[::-1]
```

## Lösung zu Aufgabe 4

```python
import random


def get_answer_options(options):
    answer = options[0]
    # Take the remaining options ([1:]) and shuffle them
    shuffled_options = options[1:]
    random.shuffle(shuffled_options)
    # Take the first 3 of the shuffled options
    result = shuffled_options[0:3]
    # Append the correct solution
    result.append(answer)
    # Shuffle again, so that the correct solution is not
    # always at the end
    random.shuffle(result)
    return result
```