```python
import random as rn
import numpy as np

"""
Problem 1
"""
def unique_words(xstring):
    """Problem 1.  Find the unique words in a string

    Args:

    Returns:

    """
    pass

def get_transition_matrix(xtr):
    """Problem 1.  Generate the transition matrix

    Args:

    Returns:
    """
    pass



"""
Problem 2
"""
def running_average(xlist,per):
    """Problem 2.  Compute thr running average

    Args:

    Returns:
```

```
    """
    pass


################################################################################
if __name__ == "__main__":
    # Fill in with code to test your functions for both problems
    # Note that the np.array() function converts the list that is returned to
    # a numpy array. This is only done for display/print purposes, so be sure that
    # your function returns a list.
    #print(np.array(get_transition_matrix(xtr)))
```