

CIS 500 – Fundamentals of Software Practice

Weekly Exercise #5

Topic: More on Lists

Write a program that produces ten random permutations of the numbers 1 to 10. To generate a random permutation, you need to fill a list with the numbers 1 to 10 so that no two entries of the list have the same contents.

Here is a sample output of ten random permutations of the numbers 1 to 10 that is generated from my solution to this exercise.

Note that each time you run this program you may get ten different random permutations.

```
$ python WCE-5.py
```

This program prints ten random permutations of the numbers 1 to 10.

```
[7, 2, 4, 3, 9, 1, 8, 10, 5, 6]
[3, 5, 8, 7, 2, 9, 1, 4, 6, 10]
[1, 5, 6, 8, 3, 7, 9, 4, 2, 10]
[7, 2, 8, 3, 9, 5, 4, 10, 6, 1]
[4, 2, 7, 9, 6, 1, 8, 3, 5, 10]
[4, 7, 3, 9, 2, 1, 5, 8, 6, 10]
[2, 7, 6, 3, 4, 9, 8, 5, 1, 10]
[1, 3, 9, 8, 5, 10, 7, 2, 4, 6]
[4, 7, 2, 8, 10, 6, 9, 5, 3, 1]
[3, 1, 10, 4, 2, 6, 9, 7, 8, 5]
```

Exercise Instructions:

- Download the file **WEX-5.py** from Blackboard.
- The file includes the algorithm to use to generate a random permutation of the numbers 1 to 10.
- Edit the file **WEX-5.py** to complete only the **TODO** sections in the function `main()`. DO NOT CHANGE other parts in this function.
- Run and test your code to make sure it works correctly.
- Upload the file **WEX-5.py** on Blackboard by midnight of due date.