

```
In [4]: import numpy as np
```

1. Extract all odd numbers from the arr.

Input:

```
In [ ]: arr = np.array([0, 1, 2, 3, 4, 5, 6, 7, 8, 9])
```

Desired output:

```
In [2]: array([1, 3, 5, 7, 9])
```

Solution:

```
In [ ]:
```

2. Replace all odd numbers in arr with -1.

Input:

```
In [ ]: arr = np.array([0, 1, 2, 3, 4, 5, 6, 7, 8, 9])
```

Desired Output:

```
In [ ]: array([ 0, -1, 2, -1, 4, -1, 6, -1, 8, -1])
```

Solutiion:

```
In [ ]:
```

3. Get the common items between a and b.

Input:

```
In [ ]: a = np.array([1,2,3,2,3,4,3,4,5,6])  
b = np.array([7,2,10,2,7,4,9,4,9,8])
```

Desired output:

```
In [12]: array([2, 4])
```

Solution:

```
In [ ]:
```

4. Create as many different arrays with the numbers 1 to 12 inclusive as the array's element.

Input:

```
In [33]: np.arange(1,13)
```

```
Out[33]: array([ 1,  2,  3,  4,  5,  6,  7,  8,  9, 10, 11, 12])
```

One possible output:

```
In [ ]: array([[1, 2, 3, 4, 5, 6],
               [7, 8, 9, 10, 11, 12]])
#2x6 array
```

Solution:

```
In [ ]:
```

5. Convert the function maxx that works on two scalars, to work on two arrays.

Input:

```
In [1]: def maxx(x, y):
        """Get the maximum of two items"""
        if x >= y:
            return x
        else:
            return y

        maxx(1, 5)
        #> 5
```

```
Out[1]: 5
```

```
In [ ]: a = np.array([5, 7, 9, 8, 6, 4, 5])
        b = np.array([6, 3, 4, 8, 9, 7, 1])
```

Desired output:

```
In [ ]: pair_max(a, b)
#> array([ 6.,  7.,  9.,  8.,  9.,  7.,  5.])
```

Solution:

```
In [ ]:
```

6. Reverse the rows of a 3x3 array.

```
In [ ]:
```

7. Create a one-dimensional array out of the maximum values for each row in the given array.

Input:

```
In [59]: np.random.seed(100)
a = np.random.randint(1,10, [5,3])
a
```

```
Out[59]: array([[9, 9, 4],
               [8, 8, 1],
               [5, 3, 6],
               [3, 3, 3],
               [2, 1, 9]])
```

Desired output:

```
In [ ]: array([9, 8, 6, 3, 9])
```

Solution:

```
In [ ]:
```