Week 2 Discussion Worksheet

1.

```
def yield_even_palindromes(lst):
    """
    Write a function that returns the strings at even indices
    that are also palindromes. Palindromes are words that are
    the same spelled backwards.

    >>> yield_even_palindromes(['121', '232', '01', '443'])
    ['121']
    >>> yield_even_palindromes(['racecar', '0', '0', '1'])
    ['racecar', '0']
    """
```

2.

```
def flip_dct(input_dct):
    """
    Write a function to invert the key, value of a dictionary where
    the new keys are the old value and the new value is the old key
    split into a list.

    >>> data = {"ben chen":42, "nikki zhang":"genshin", "max wei":(1,2,3)}
    >>> change_dct(data)
    {42:['ben', 'chen'], "genshin":['nikki', 'zhang'], \
    (1,2,3):['max', 'wei']}
    """
```

3. Assume the following code is ran:

```
data = {
    "nikki": {"math": [20, 70, 40], "dsc": (100), "philosophy": 'socrates'},
     "bobby": {"math": [55, 42, 37, 2], "dsc": (88, 76), "philosophy": 'plato'},
      "max": {"math": [0, 22, 43, 17, 0], "dsc": (66), "philosophy": 'friedrich nietzsche'}
}
```

Write a statement that results in Nikki's highest math score.

Write a statement that results in the second score for Bobby in DSC.

Write a statement that results in max' philosophy's last name.

4.

```
def resume_filler(application, resume):
    """
    Write a function that fills an application
    with information from the provided resume
    if the field is missing.

    >>> application_1 = {"loc": "SF", "job": "SWE", "company":"Delos"}
    >>> application_2 = {"name": "nikki" ,"loc": "LA", "job": "DSC"}
    >>> resume = {"name":"nikki", "exp": "intern", "loc": "USA"}
    >> resume_filler(application_1, resume)
    {'loc': 'SF','job': 'SWE','company': 'Delos','name': 'nikki','exp': 'intern'}
    >>> resume_filler(application_2, resume)
    {'name': 'nikki', 'loc': 'LA', 'job': 'DSC', 'exp': 'intern'}
    """
```