

1. Write a function called `middle` that takes a list and returns a new list that contains all but the first and last elements.

For example:

```
>>> t = [1, 2, 3, 4]
```

```
>>> middle(t)[2, 3]
```

2. Write a function called `chop` that takes a list, modifies it by removing the first and last elements, and returns `None`.

For example:

```
>>> t = [1, 2, 3, 4]
```

```
>>> chop(t)
```

```
>>> t[2, 3]
```

3. Write a function called `is_sorted` that takes a list as a parameter and returns `True` if the list is sorted in ascending order and `False` otherwise.

For example:

```
>>> is_sorted([1, 2, 2])True
```

```
>>> is_sorted(['b', 'a'])False
```

4. Write a Python program to display a calendar month for any given month between January 1800 and December 2099. The format of the month should be as shown

| MAY 2012 | | | | | | |
|----------|-----|------|-----|------|-----|-----|
| Sun | Mon | Tues | Wed | Thur | Fri | Sat |
| | | 1 | 2 | 3 | 4 | 5 |
| 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 13 | 14 | 15 | 16 | 17 | 18 | 19 |
| 20 | 21 | 22 | 23 | 24 | 25 | 26 |
| 27 | 28 | 29 | 30 | 31 | | |

5. Consider the list
`names = ['resmelts', 'sweeter', 'manifesto', 'deltas', 'year', 'match', 'wonderful', 'here', 'generating', 'stated', 'staled', 'desalt', 'ternaries', 'where', 'lasted', 'slated', 'balance', 'retainers', 'cat', 'greatening', 'ant', 'smelters', 'word', 'salted', 'vitality', 'termless']`

Write a program that prints all the sets of words that are anagrams.

6. Consider the following matrix:

```
[[1,4,5,6],
```

```
[6,9, 1, 8],
```

```
[9,4,3,1]]
```

Write a python program that returns all possible submatrices with sum of the elements = 15