Assignment 6, Question 4f, Amogha Sekhar, A53301791
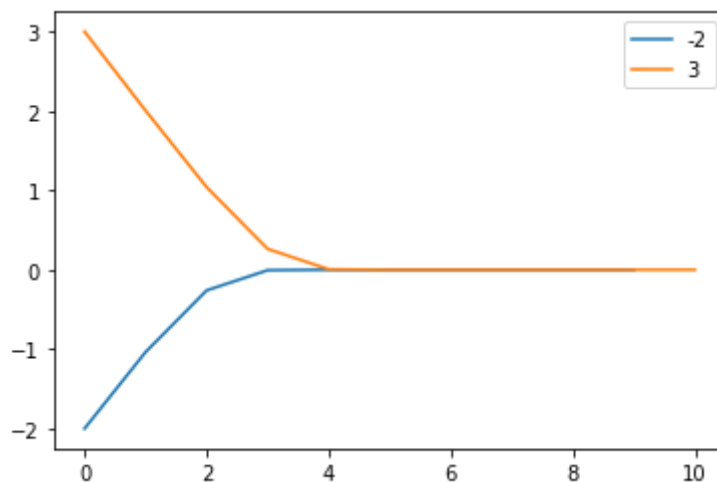
```python
In [1]: import numpy as np
        import matplotlib.pyplot as plt
```

```python
In [2]: def converged(list):
            flag = True
            if len(list) < 4:
                return False
            for i in range(3):
                if list[-i-1][1] != list[-i-2][1]:
                    flag = False
            return flag
```

```python
In [3]: X = [-2,3]
        for x in X:
            list_x = []
            temp = x
            list_x.append((0, temp))
            counter = 1
            while not converged(list_x):
                temp = temp- np.tanh(temp)
                list_x.append((counter, temp))
                counter += 1
            print(x, counter, temp)
            x_axis, y_axis = zip(*list_x)
            plt.plot(x_axis, y_axis, label = x)

        plt.legend()
        plt.show()
```

```
-2 10 0.0
3 11 0.0
```



```python
In [ ]:
```