Raul Rodriguez

```python
HWname=[]
HWgrade=[]
n=int(input("How many grades do you wish to enter?: "))
for i in range(n):
    name=input("Enter name: ")
    HWname.append(name)
    grade=int(input("Enter grade: "))
    HWgrade.append(grade)
gradesDictionary={}
for i in range(n):
    gradesDictionary[HWname[i]]=HWgrade[i]
print(gradesDictionary)
```

```
/usr/local/bin/python3 /Users/raulrodriguez/Documents/WorkSpaceVSPython/Midterm_1.py
raulrodriguez@Rauls-Air WorkSpaceVSPython % /usr/local/bin/python3 /Users/raulrodriguez/Documents/WorkSpaceVSPython/Midterm_1.py
How many grades do you wish to enter?: 3
Enter name: HW1
Enter grade: 90
Enter name: HW2
Enter grade: 89
Enter name: HW3
Enter grade: 87
{'HW1': 90, 'HW2': 89, 'HW3': 87}
raulrodriguez@Rauls-Air WorkSpaceVSPython %
```

```python
from functools import reduce
myList=[2,3,-1,4,8,9]
print(reduce(lambda a,b: a if a<b else b,myList))
```

```
/usr/local/bin/python3 /Users/raulrodriguez/Documents/WorkSpaceVSPython/Midterm_2.py
raulrodriguez@Rauls-Air WorkSpaceVSPython % /usr/local/bin/python3 /Users/raulrodriguez/Documents/WorkSpaceVSPython/Midterm_2.py
-1
raulrodriguez@Rauls-Air WorkSpaceVSPython %
```

```python
from matplotlib import pyplot as plt
grades ={'HW1':93,'HW2':85,'HW3':94,'HW4':90,'HW5':82}
x=list(grades.keys())
y=list(grades.values())
plt.plot(x,y)
plt.xlabel("HW name")
plt.ylabel("Grade")
plt.title("HW grades plot")
plt.ylim(0,100)
minimum=y[0]
maximum=y[0]
for i in range(len(y)):
    if y[i]<minimum:
        a=i
    if y[i]>maximum:
        b=i
plt.scatter(x[a],min(y),label='min grade',color='r')
plt.scatter(x[b],max(y),label='max grade',color='g')
plt.legend()
plt.show()
```

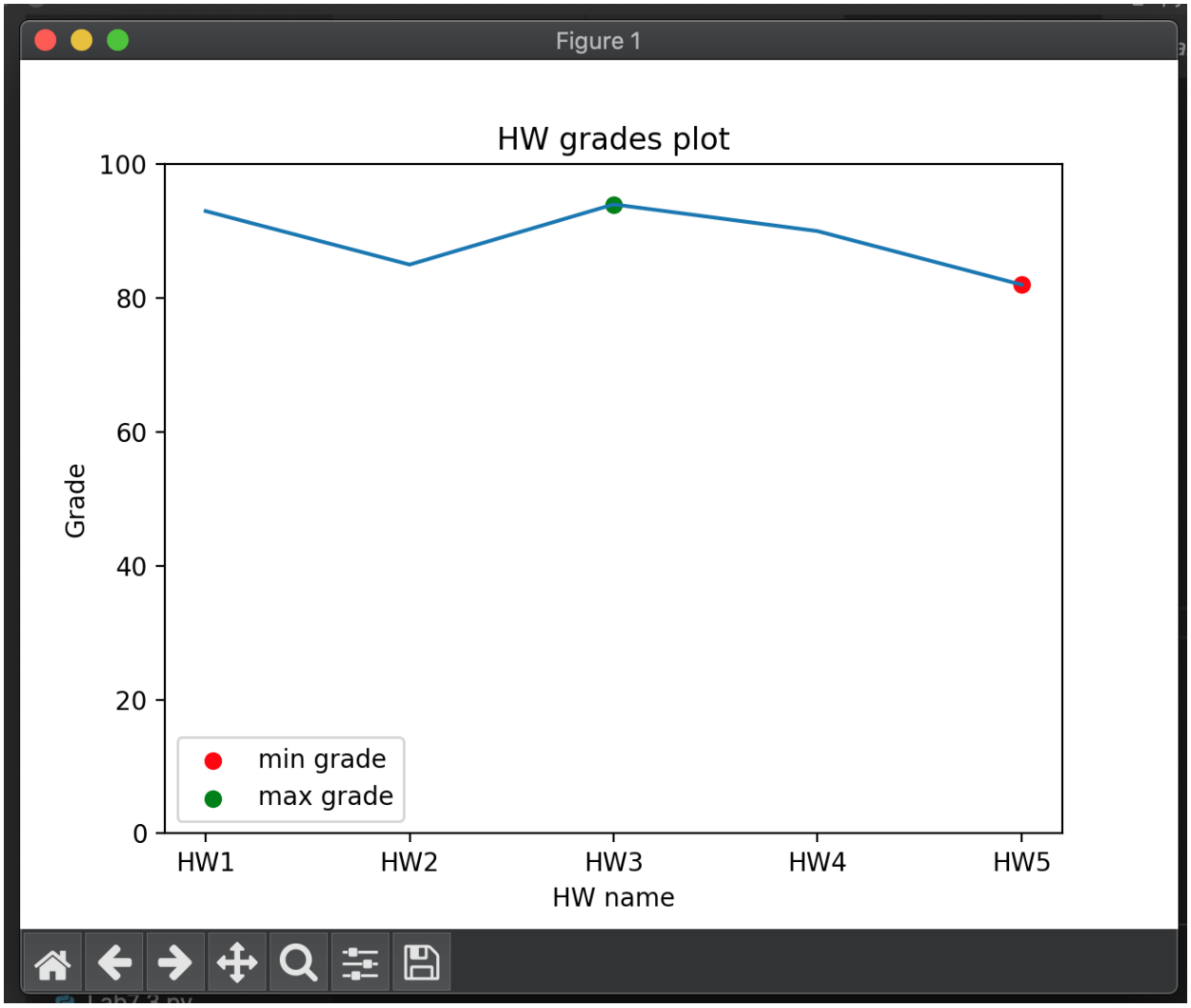
Figure 1
HW grades plot
100
80
60
40
20
0
Grade
min grade
max grade
HW1
HW2
HW3
HW4
HW5
HW name