

hw1.py U X

visual > assignments > week4 > hw1.py > ...

```
1  # 값 입력받기
2  user_value = input("실수 값을 입력해주세요 :")
3
4  # 입력받은 값 파싱
5  x, y = user_value.split(' ', ' ')
6
7  # 실수로 변환
8  x = float(x)
9  y = float(y)
10
11 # 튜플로 구성하여 출력
12 a = (x, y)
13 print(a)
```

OUTPUT PROBLEMS TERMINAL ...

+ v ... ^ X

```
> /opt/homebrew/bin/python3 /Users/shwn_mac/Documents/
CAU/Cau_dev/visual/assignments/week4/hw1.py
실수 값을 입력해주세요 :12.34, 56.78
(12.34, 56.78)
```

Python

Python

Python D...

hw2.py U X

visual > assignments > week4 > hw2.py > ...

```
1 points = [  
2     (1, 1), (2, 2), (3, -1), (4, 0), (-4, 6)  
3 ]  
4  
5 # 무게중심 구하기  
6 sum_x = 0  
7 sum_y = 0  
8 for i in range(len(points)):  
9     sum_x += points[i][0]  
10    sum_y += points[i][1]  
11  
12 m = ((sum_x / 5), (sum_y / 5))  
13 # print(m)  
14  
15 # 무게중심과의 거리 구하기  
16 distances = []  
17 for i in range(len(points)):  
18     distance = (points[i][0] - m[0]) ** 2 + (points[i][1] - m[1]) ** 2  
19     distances.append(distance)  
20  
21 for i in range(len(points)):  
22     print(distances[i])
```

OUTPUT

PROBLEMS

DEBUG CONSOLE

TERMINAL

...

+ v ... ^ X

```
> /opt/homebrew/bin/python3 /Users/shwn_mac/Documents/CAU/Cau_dev/visual/assignments/week4/hw2.py  
0.4000000000000001  
0.8  
10.0  
10.399999999999999  
46.400000000000006
```

Python
Python
Python D...

Apple > ~/Doc/CA/Cau_dev > main !15 ?7 17:40:00

UTF-8

LF

{ }

Python

3.12.5 64-bit

Go

Live

Codeium: ↻

Prettier

🔔

← →

Cau_dev

hw3.py U ×

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⋮

visual > assignments > week4 > hw3.py > ...
1 a = [12, 24, 125, 2, 4]
2
3 a_sorted = sorted(a)
4 print(a_sorted)
5
6 for i in range(len(a)):
7 print(a_sorted.index(a[i]))
8

OUTPUT

PROBLEMS

DEBUG CONSOLE

TERMINAL

⋮

ev/visual/assignments/week4/hw3.py
[2, 4, 12, 24, 125]
2
3
4
0
1

Python

Python

Python D...

🍏

~/Doc/CA/Cau_dev

main !15 ?7

✓

17:42:59

UTF-8 LF {} Python 3.12.5 64-bit Go Live Codeium: Prettier



Untitled (Workspace)



hw4.py M x



Cau_dev > visual > assignments > week4 > hw4.py > ...

```
3 for i in range(5):
4     x, y = input(f"x,y좌표를 점으로 구분하여 점 5개를 입력하세요 ({i}/5): ").split(',')
5     x = int(x)
6     y = int(y)
7     points.append((x, y))
8     # print(points)
9
10 x, y = input("x,y좌표를 점으로 구분하여 기준점 1개를 입력하세요: ").split(',')
11 x = int(x)
12 y = int(y)
13 query = [x, y]
14 # print(query)
15
16 # 무게중심과의 거리 구하기
17 distances = []
18 for i in range(len(points)):
19     d = (points[i][0] - query[0]) ** 2 + (points[i][1] - query[1]) ** 2
20     distances.append(d)
21
22 # 가장 가까운 점 출력
23 for i in range(len(distances)):
24     if distances[i] == 0:
25         distances[i] = 99999999
26
27 min_distance = min(distances)
28 if min_distance == 99999999:
29     print("죄다 똑같습니다...")
30 else:
31     result_index = distances.index(min_distance)
32     print("가장 가까운 점은...")
33     print(points[result_index])
34
```

OUTPUT PROBLEMS DEBUG CONSOLE TERMINAL COMMENTS PORTS

```
> /opt/homebrew/bin/python3 /Users/shwn_mac/Documents/CAU/Cau_dev/visual/assignments/week4/hw4.py
```

```
x,y좌표를 점으로 구분하여 점 5개를 입력하세요 (0/5): 2,5
x,y좌표를 점으로 구분하여 점 5개를 입력하세요 (1/5): 1,0
x,y좌표를 점으로 구분하여 점 5개를 입력하세요 (2/5): -9,2
x,y좌표를 점으로 구분하여 점 5개를 입력하세요 (3/5): 4,13
x,y좌표를 점으로 구분하여 점 5개를 입력하세요 (4/5): 0,0
x,y좌표를 점으로 구분하여 기준점 1개를 입력하세요 : 0,0
가장 가까운 점은 ...
(1, 0)
```

```
~/Doc/CAU/Cau_dev > main !1 72
```

```
✓ < 11s < 19:17:58
```

```
Python...
Python...
Python...
Python...
```