

I

```
2dlist = [list1, list2, list3]
```

A list made up of lists

	Sex	Race	Height	Income	Marital Status	Years of Edc.
R1001	M	1	70	50	1	12
R1002	M	2	72	100	2	20
R1003	F	1	55	250	1	16
R1004	M	2	65	20	2	16
R1005	F	1	60	10	3	12
R1006	M	1	48	30	1	9
R1007	F	5	66	25	2	21
R1008	F	4	61	43	1	18
R1009	M	1	69	67	1	12

```
L  
2 fruits = ["apple", "orange", "banana", "coconut"]  
3 vegetables = ["celery", "carrots", "potatoes"]  
4 meats = ["chicken", "fish", "turkey"]  
5  
6
```

```
groceries = [fruits, vegetables, meats]
```

```
7  
8 fruits[0]  
9 print(fruits)
```

```
main.py
C:\Users\HP\PycharmProjects\GroceryList
1
2     fruits = ["apple", "orange", "banana", "coconut"]
3     vegetables = ["celery", "carrots", "potatoes"]
4     meats = ["chicken", "fish", "turkey"]
5
6     groceries = [fruits, vegetables, meats]
7
8     fruits[0] = "pineapple"
9     print(fruits)
```

```
(Pyc) 1  
2     fruits = ["apple", "orange", "banana", "coconut"]  
3     vegetables = ["celery", "carrots", "potatoes"]  
4     meats = ["chicken", "fish", "turkey"]  
5  
6     groceries = [fruits, vegetables, meats]  
7  
8     print(groceries[0])
```

This returns an entire row

```
fruits = ["apple", "orange", "banana", "coconut"]
vegetables = ["celery", "carrots", "potatoes"]
meats = ["chicken", "fish", "turkey"]

groceries = [fruits, vegetables, meats]

print(groceries[0][1])
```

```
1
2     fruits = ["apple", "orange", "banana", "coconut"]
3     vegetables = ["celery", "carrots", "potatoes"]
4     meats = ["chicken", "fish", "turkey"]
5
6     groceries = [fruits, vegetables, meats]
7
8     print(groceries[1][1])
```

New Navigate Code Refactor Run Tools View Window Help practice main.py

py

main main

main.py

```
1
2     fruits = ["apple", "orange", "banana", "coconut"]
3     vegetables = ["celery", "carrots", "potatoes"]
4     meats = ["chicken", "fish", "turkey"]
5
6     groceries = [fruits, vegetables, meats]
7
8     print(groceries[2][3])
```

Libraries
and Consoles

```
\HP\Pyct
1
2     fruits = ["apple", "orange", "banana", "coconut"]
3     vegetables = ["celery", "carrots", "potatoes"]
4     meats = ["chicken", "fish", "turkey"]
5
6     groceries = [fruits, vegetables, meats]
7
8     print(groceries[2][1])
```

```
1  
2 fruits = ["apple", "orange", "banana", "coconut"]  
3 vegetables = ["celery", "carrots", "potatoes"]  
4 meats = ["chicken", "fish", "turkey"]  
5  
6 groceries = [fruits, vegetables, meats]  
7  
8 print(groceries[0][0])
```

```
1
2 groceries| = [["apple", "orange", "banana", "coconut"],
3                 ["celery", "carrots", "potatoes"],
4                 ["chicken", "fish", "turkey"]]
5
6 print(groceries[0][0])
```

Project

Pr... + E - ⚙ main.py
practice C:\Users\HP\PyCh
> venv
main.py
> External Libraries
Scratches and Consoles

```
1
2     groceries = [["apple", "orange", "banana", "coconut"],
3                     ["celery", "carrots", "potatoes"],
4                     ["chicken", "fish", "turkey"]]
5
6     for collection in groceries:
7         print(collection)
```

This iterates over the rows

Run:

main x



```
['apple', 'orange', 'banana', 'coconut']
['celery', 'carrots', 'potatoes']
['chicken', 'fish', 'turkey']
```

```
main.py x
C:\Users\HP\PycharmProjects\practice\venv\bin\python.exe C:/Users/HP/PycharmProjects/practice/main.py
apple
orange
banana
coconut
```

1
2 groceries = [["apple", "orange", "banana", "coconut"],
3 ["celery", "carrots", "potatoes"],
4 ["chicken", "fish", "turkey"]]
5
6 for collection in groceries:
7 for food in collection:
8 print(food)

This iterates over the elements in each row

practice > main.py

main

Project
practice C:\Users\HP\PycharmProjects\practice
venv
main.py
External Libraries
Scratches and Consoles

```
1  
2     groceries = [["apple", "orange", "banana", "coconut"],  
3                     ["celery", "carrots", "potatoes"],  
4                     ["chicken", "fish", "turkey"]]  
5  
6     for collection in groceries:  
7         for food in collection:  
8             print(food, end=" ")  
9     print()
```

for collection in groceries

Run: main

C:\Users\HP\PycharmProjects\practice\venv\Scripts\python.exe C:/Users/HP/PycharmProjects/practice/main.py
apple orange banana coconut celery carrots potatoes chicken fish turkey

The screenshot shows the PyCharm IDE interface with a dark theme. On the left, the project structure is visible with a 'practice' folder containing 'venv', 'main.py', 'External Libraries', and 'Scratches and Consoles'. The 'main.py' file is open in the editor.

```
1 num_pad = ((1, 2, 3),
2             (4, 5, 6),
3             (7, 8, 9),
4             ("*", 0, "#"))
5
6
7 for row in num_pad:
8     print(row)
```

The code defines a tuple `num_pad` containing four rows. Each row is a tuple of three elements: numbers 1-9 and symbols `*`, `0`, and `#`. A `for` loop iterates over each row and prints it.

In the bottom terminal window, the output of the script is shown:

```
for row in num_pad
(1, 2, 3)
(4, 5, 6)
(7, 8, 9)
('*', 0, '#')
```

practice C:\Users\vir\PycharmProjects> venv main.py External Libraries Scratches and Consoles

```
1 num_pad = ((1, 2, 3),
2                 (4, 5, 6),
3                 (7, 8, 9),
4                 ("*", 0, "#"))
5
6
7 for row in num_pad:
8     for num in row:
9         print(num, end=" ")
```

for row in num_pad : for num in row

run: main

*
0
#

```
1
2     num_pad = ((1, 2, 3),
3                  (4, 5, 6),
4                  (7, 8, 9),
5                  ("*", 0, "#"))
6
7     for row in num_pad:
8         for num in row:
9             print(num, end=" ")
10        print()
```

for row in num_pad

Run: main

```
1 2 3
4 5 6
7 8 9
* 0 # |
```


