

The screenshot shows the Visual Studio Code interface with a file named 'helo-1.py' open. The Explorer sidebar on the left shows the file structure with 'helo-1.py' and a folder 'PYTHON.MAIN' containing a file 'first'. The main editor area displays the following Python code:

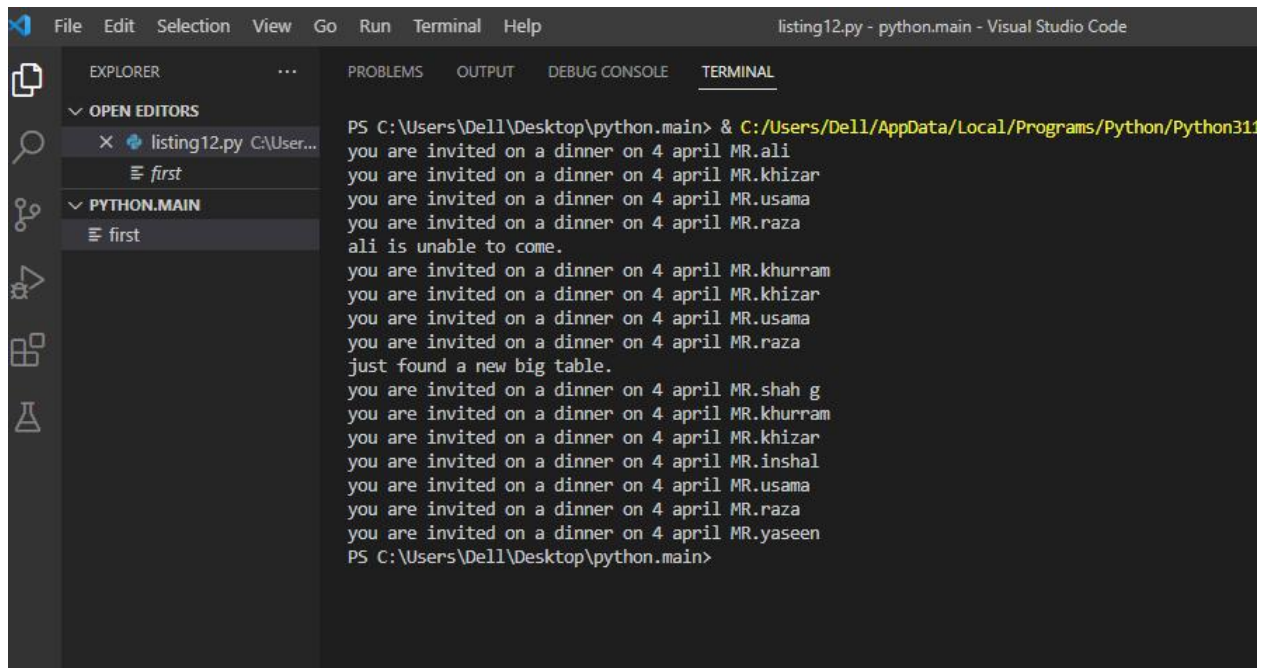
```
1 names=['khizar', 'yaseen', 'zakriya']
2 message1=("your name is\t"+names[0])
3 message2=("your name is\t"+names[1])
4 message3=("your name is\t"+names[2])
5 print(message1)
6 print(message2)
7 print(message3)
```

The TERMINAL panel at the bottom shows the command prompt output:

```
PS C:\Users\Dell\Desktop\python.main> & C:/Users/Dell/AppData/Local/Programs/Python/Python311/python.exe c:/Users/Dell/Desktop/helo-1.py
your name is khizar
your name is yaseen
your name is zakriya
PS C:\Users\Dell\Desktop\python.main>
```

The screenshot shows the Visual Studio Code interface with a file named 'listing12.py' open. The Explorer sidebar on the left shows the file structure with 'listing12.py' and a folder 'PYTHON.MAIN' containing a file 'first'. The main editor area displays the following Python code:

```
1 friends=['ali', 'khizar', 'usama', 'raza']
2
3 print("you are invited on a dinner on 4 april MR."+ friends[0])
4 print("you are invited on a dinner on 4 april MR."+ friends[1])
5 print("you are invited on a dinner on 4 april MR."+ friends[2])
6 print("you are invited on a dinner on 4 april MR."+ friends[3])
7 print(friends[0] +" is unable to come.")
8 #del friends[0]
9 friends[0]='khurram'
10 print("you are invited on a dinner on 4 april MR."+ friends[0])
11 print("you are invited on a dinner on 4 april MR."+ friends[1])
12 print("you are invited on a dinner on 4 april MR."+ friends[2])
13 print("you are invited on a dinner on 4 april MR."+ friends[3])
14 print("just found a new big table.")
15 friends.insert(0,'shah g')
16 friends.insert(3,'inshal')
17 friends.append(['yaseen'])
18 print("you are invited on a dinner on 4 april MR."+ friends[0])
19 print("you are invited on a dinner on 4 april MR."+ friends[1])
20 print("you are invited on a dinner on 4 april MR."+ friends[2])
21 print("you are invited on a dinner on 4 april MR."+ friends[3])
22 print("you are invited on a dinner on 4 april MR."+ friends[4])
23 print("you are invited on a dinner on 4 april MR."+ friends[5])
24 print("you are invited on a dinner on 4 april MR."+ friends[6])
25
```



listing12.py - python.main - Visual Studio Code

EXPLORER

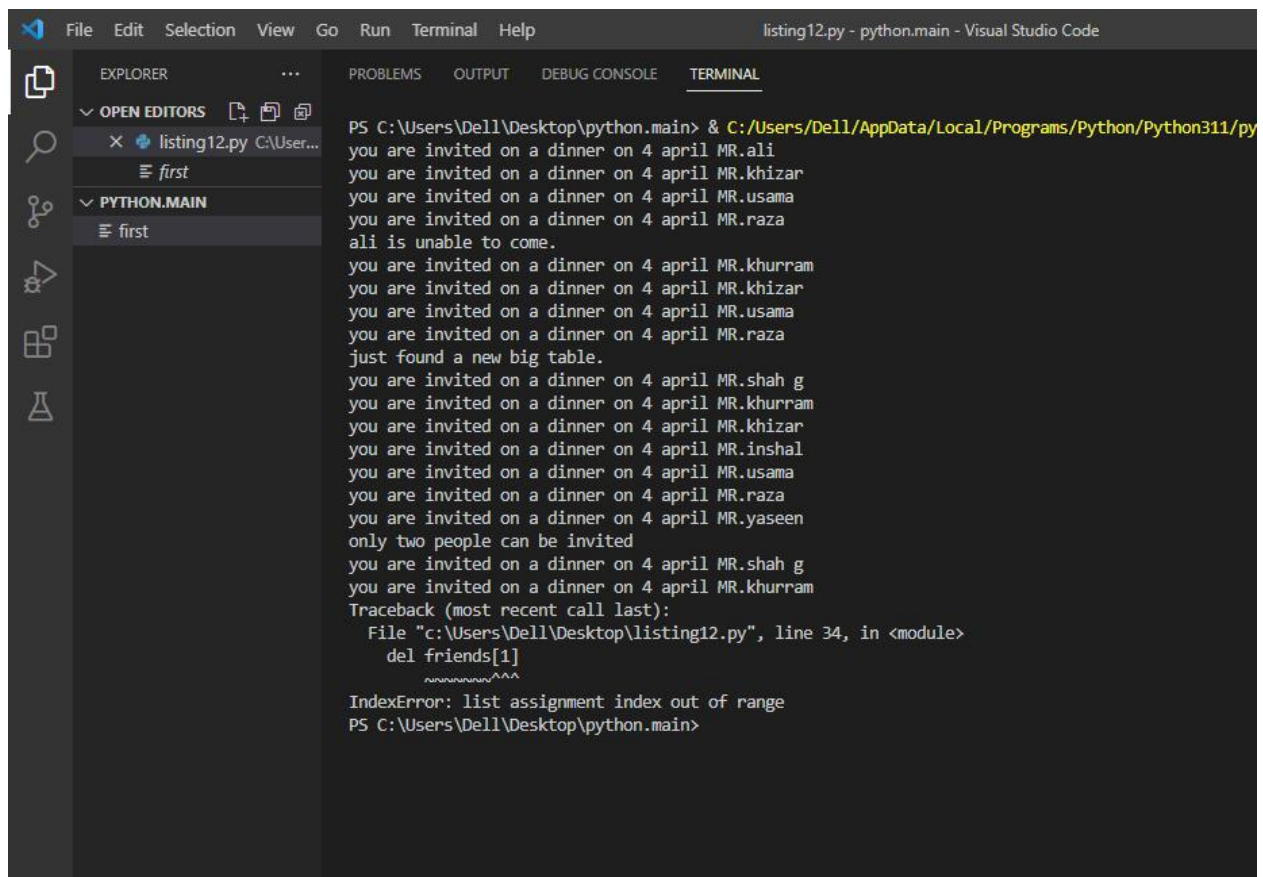
OPEN EDITORS

- listing12.py C:\User...
- first

PYTHON.MAIN

- first

```
PS C:\Users\Dell\Desktop\python.main> & C:/Users/Dell/AppData/Local/Programs/Python/Python311/python.exe listing12.py
you are invited on a dinner on 4 april MR.ali
you are invited on a dinner on 4 april MR.khizar
you are invited on a dinner on 4 april MR.usama
you are invited on a dinner on 4 april MR.raza
ali is unable to come.
you are invited on a dinner on 4 april MR.khurram
you are invited on a dinner on 4 april MR.khizar
you are invited on a dinner on 4 april MR.usama
you are invited on a dinner on 4 april MR.raza
just found a new big table.
you are invited on a dinner on 4 april MR.shah g
you are invited on a dinner on 4 april MR.khurram
you are invited on a dinner on 4 april MR.khizar
you are invited on a dinner on 4 april MR.inshal
you are invited on a dinner on 4 april MR.usama
you are invited on a dinner on 4 april MR.raza
you are invited on a dinner on 4 april MR.yaseen
PS C:\Users\Dell\Desktop\python.main>
```



listing12.py - python.main - Visual Studio Code

EXPLORER

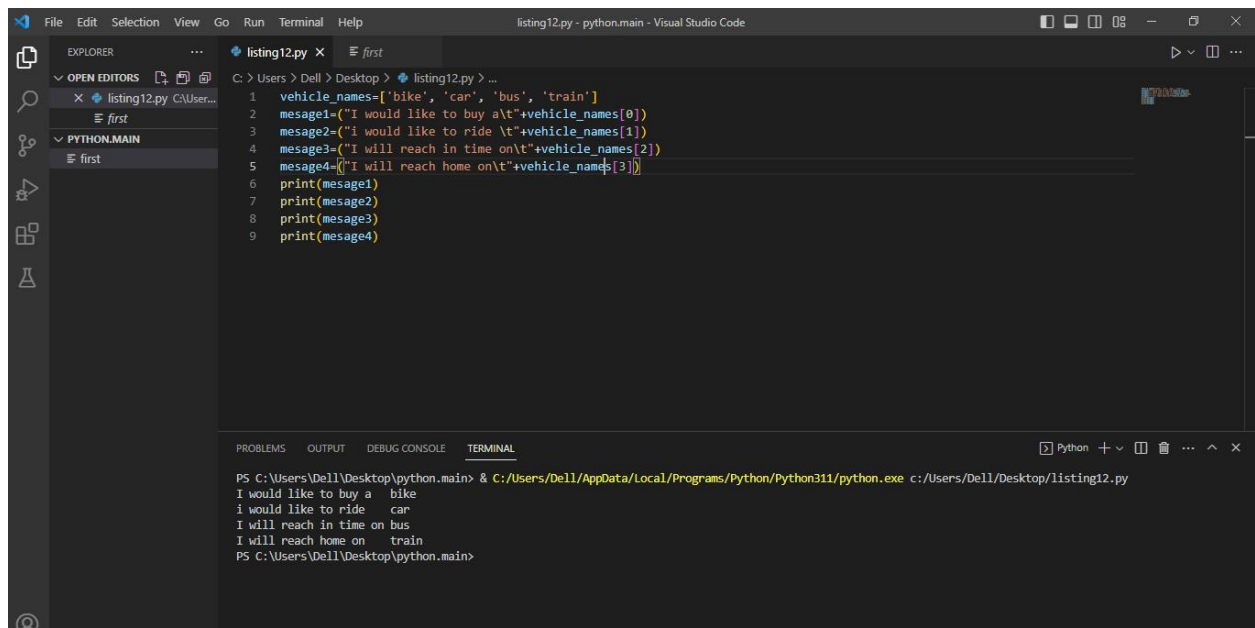
OPEN EDITORS

- listing12.py C:\User...
- first

PYTHON.MAIN

- first

```
PS C:\Users\Dell\Desktop\python.main> & C:/Users/Dell/AppData/Local/Programs/Python/Python311/python.exe listing12.py
you are invited on a dinner on 4 april MR.ali
you are invited on a dinner on 4 april MR.khizar
you are invited on a dinner on 4 april MR.usama
you are invited on a dinner on 4 april MR.raza
ali is unable to come.
you are invited on a dinner on 4 april MR.khurram
you are invited on a dinner on 4 april MR.khizar
you are invited on a dinner on 4 april MR.usama
you are invited on a dinner on 4 april MR.raza
just found a new big table.
you are invited on a dinner on 4 april MR.shah g
you are invited on a dinner on 4 april MR.khurram
you are invited on a dinner on 4 april MR.khizar
you are invited on a dinner on 4 april MR.inshal
you are invited on a dinner on 4 april MR.usama
you are invited on a dinner on 4 april MR.raza
you are invited on a dinner on 4 april MR.yaseen
only two people can be invited
you are invited on a dinner on 4 april MR.shah g
you are invited on a dinner on 4 april MR.khurram
Traceback (most recent call last):
  File "c:\Users\Dell\Desktop\listing12.py", line 34, in <module>
    del friends[1]
    ~~~~~^~
IndexError: list assignment index out of range
PS C:\Users\Dell\Desktop\python.main>
```

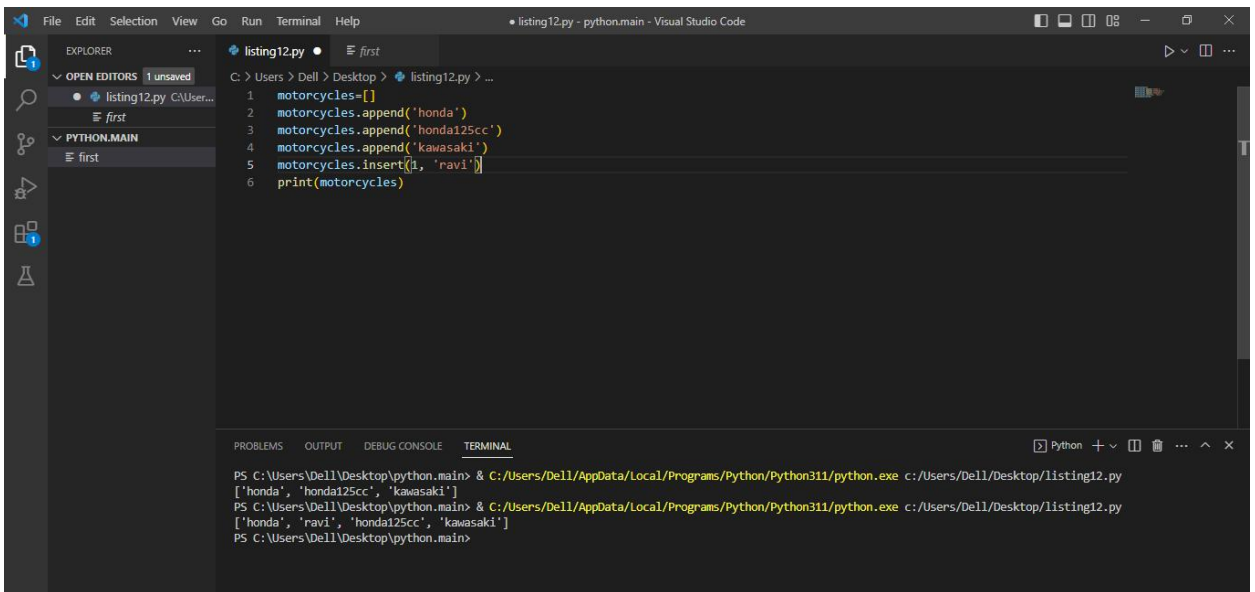


```
File Edit Selection View Go Run Terminal Help
listing12.py - python.main - Visual Studio Code

EXPLORER
OPEN EDITORS
listing12.py C:\User...
first
PYTHON_MAIN
first

C: > Users > Dell > Desktop > listing12.py > ...
1 vehicle_names=['bike', 'car', 'bus', 'train']
2 message1=("I would like to buy a\t"+vehicle_names[0])
3 message2=("I would like to ride \t"+vehicle_names[1])
4 message3=("I will reach in time on\t"+vehicle_names[2])
5 message4=("I will reach home on\t"+vehicle_names[3])
6 print(message1)
7 print(message2)
8 print(message3)
9 print(message4)

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL
Python + - - - - -
PS C:\Users\Dell\Desktop\python.main> & C:/Users/Dell/AppData/Local/Programs/Python/Python311/python.exe c:/Users/Dell/Desktop/listing12.py
I would like to buy a bike
I would like to ride car
I will reach in time on bus
I will reach home on train
PS C:\Users\Dell\Desktop\python.main>
```



```
File Edit Selection View Go Run Terminal Help
listing12.py - python.main - Visual Studio Code

EXPLORER
OPEN EDITORS
1 unsaved
listing12.py C:\User...
first
PYTHON_MAIN
first

C: > Users > Dell > Desktop > listing12.py > ...
1 motorcycles=[]
2 motorcycles.append('honda')
3 motorcycles.append('honda125cc')
4 motorcycles.append('kawasaki')
5 motorcycles.insert(1, 'ravi')
6 print(motorcycles)

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL
Python + - - - - -
PS C:\Users\Dell\Desktop\python.main> & C:/Users/Dell/AppData/Local/Programs/Python/Python311/python.exe c:/Users/Dell/Desktop/listing12.py
['honda', 'honda125cc', 'kawasaki']
PS C:\Users\Dell\Desktop\python.main> & C:/Users/Dell/AppData/Local/Programs/Python/Python311/python.exe c:/Users/Dell/Desktop/listing12.py
['honda', 'ravi', 'honda125cc', 'kawasaki']
PS C:\Users\Dell\Desktop\python.main>
```

The screenshot shows the Visual Studio Code interface with a file explorer on the left and a terminal at the bottom. The file explorer shows a project named 'python.main' with a file 'first'. The editor displays a Python script named 'listing12.py' with the following code:

```
1 motorcycles=[]
2 motorcycles.append('honda')
3 motorcycles.append('honda125cc')
4 motorcycles.append('kawasaki')
5 motorcycles.insert(1, 'ravi')
6 del motorcycles[4]
7 print(motorcycles)
```

The terminal shows the execution of the script using the command `python.exe c:/Users/Dell/Desktop/listing12.py`. The output is:

```
PS C:\Users\Dell\Desktop\python.main> & C:/Users/Dell/AppData/Local/Programs/Python/Python311/python.exe c:/Users/Dell/Desktop/listing12.py
['honda', 'honda125cc', 'kawasaki']
PS C:\Users\Dell\Desktop\python.main> & C:/Users/Dell/AppData/Local/Programs/Python/Python311/python.exe c:/Users/Dell/Desktop/listing12.py
['honda', 'ravi', 'honda125cc', 'kawasaki']
PS C:\Users\Dell\Desktop\python.main> & C:/Users/Dell/AppData/Local/Programs/Python/Python311/python.exe c:/Users/Dell/Desktop/listing12.py
['honda', 'honda125cc', 'kawasaki']
PS C:\Users\Dell\Desktop\python.main>
```

The screenshot shows the Visual Studio Code interface with a file explorer on the left and a terminal at the bottom. The file explorer shows a project named 'python.main' with a file 'first'. The editor displays a Python script named 'listing12.py' with the following code:

```
1 motorcycles=[]
2 motorcycles.append('honda')
3 motorcycles.append('honda125cc')
4 motorcycles.append('kawasaki')
5 popped_motorcycles=motorcycles.pop()
6 print(motorcycles)
7 print(popped_motorcycles)
```

The terminal shows the execution of the script using the command `python.exe c:/Users/Dell/Desktop/listing12.py`. The output is:

```
PS C:\Users\Dell\Desktop\python.main> & C:/Users/Dell/AppData/Local/Programs/Python/Python311/python.exe c:/Users/Dell/Desktop/listing12.py
['honda', 'honda125cc']
kawasaki
PS C:\Users\Dell\Desktop\python.main>
```

The screenshot shows the Visual Studio Code interface with a file explorer on the left and a code editor in the center. The file explorer shows a project named 'python.main' with a file 'first'. The code editor displays a Python script named 'listing12.py' with the following code:

```
1 motorcycles=[]
2 motorcycles.append('honda')
3 motorcycles.append('honda125cc')
4 motorcycles.append('kawasaki')
5 popped_motorcycles=motorcycles.pop()
6 print(motorcycles)
7 print(f'the last motorcycle i owned was '+ popped_motorcycles)
```

The terminal at the bottom shows the execution of the script:

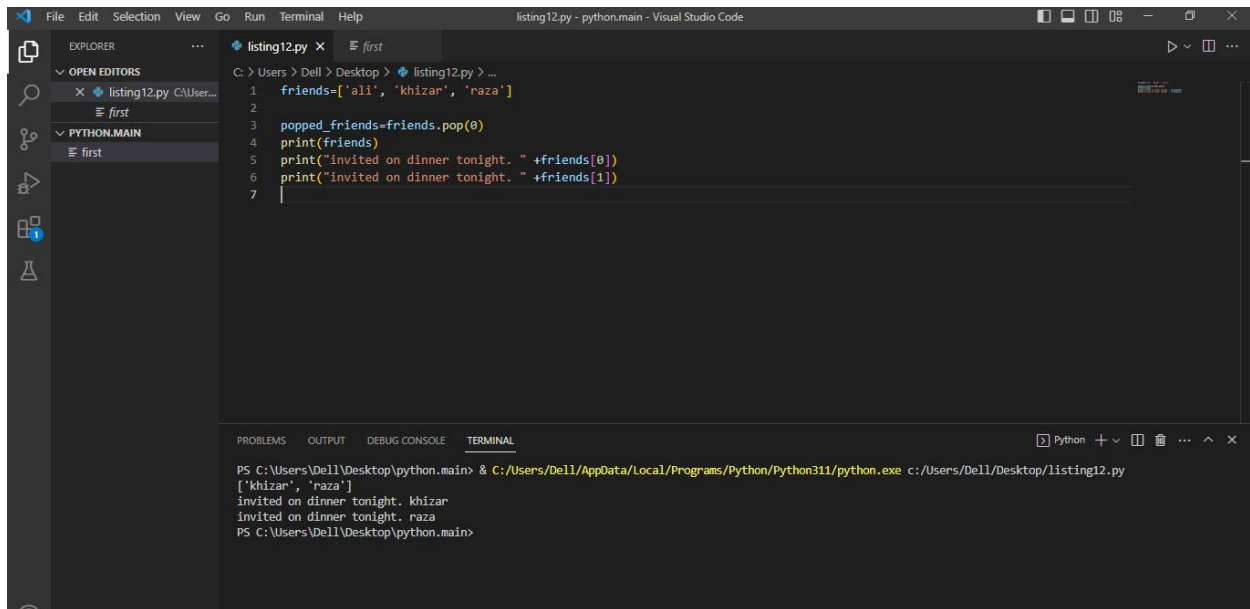
```
PS C:\Users\De11\Desktop\python.main> & C:/Users/De11/AppData/Local/Programs/Python/Python311/python.exe c:/Users/De11/Desktop/listing12.py
['honda', 'honda125cc']
kawasaki
PS C:\Users\De11\Desktop\python.main> & C:/Users/De11/AppData/Local/Programs/Python/Python311/python.exe c:/Users/De11/Desktop/listing12.py
['honda', 'honda125cc']
the last motorcycle i owned was kawasaki
PS C:\Users\De11\Desktop\python.main>
```

The screenshot shows the Visual Studio Code interface with a file explorer on the left and a code editor in the center. The file explorer shows a project named 'python.main' with a file 'first'. The code editor displays a Python script named 'listing12.py' with the following code:

```
1 friends=['ali', 'khizar', 'raza']
2 print("invited on dinner tonight. " +friends[0])
3 print("invited on dinner tonight. " +friends[1])
4 print(f"invited on dinner tonight. " +friends[2])
```

The terminal at the bottom shows the execution of the script:

```
PS C:\Users\De11\Desktop\python.main> & C:/Users/De11/AppData/Local/Programs/Python/Python311/python.exe c:/Users/De11/Desktop/listing12.py
invited on dinner tonight. ali
invited on dinner tonight. khizar
invited on dinner tonight. raza
PS C:\Users\De11\Desktop\python.main>
```

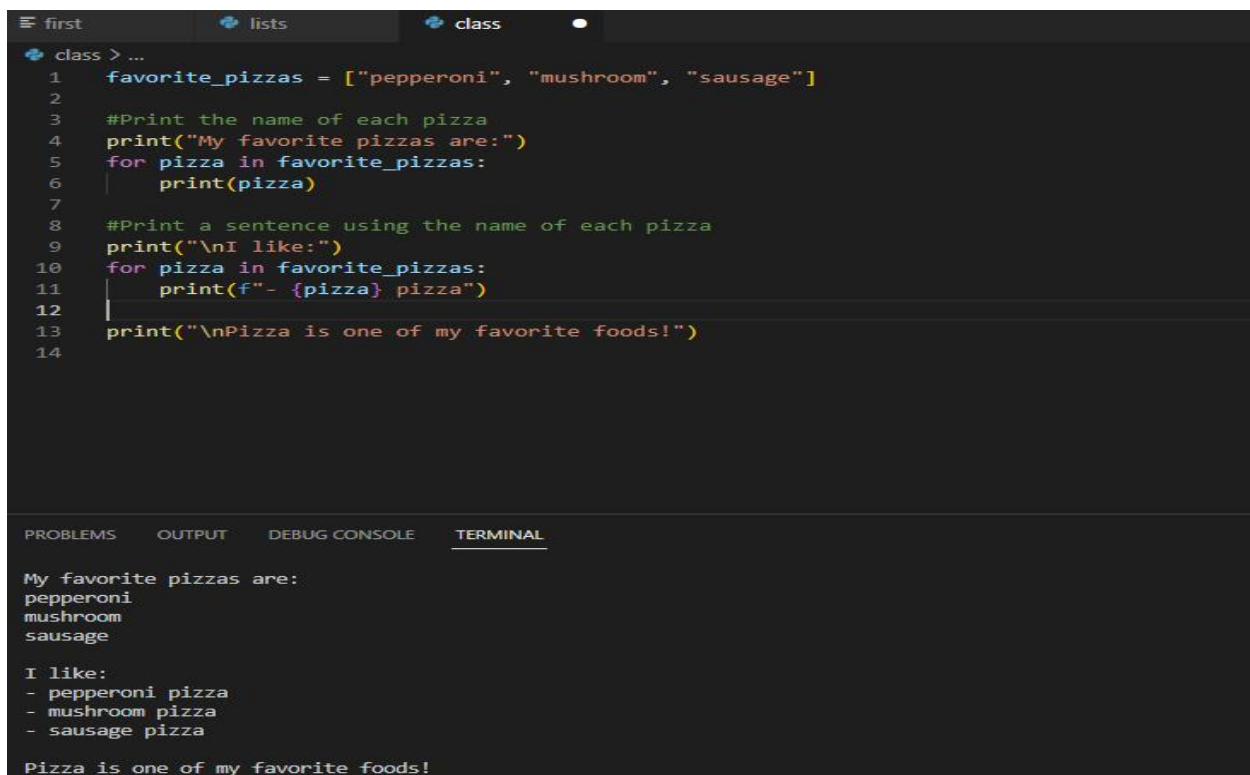



The screenshot shows the Visual Studio Code interface with a file explorer on the left and a code editor in the center. The file explorer shows the file `listing12.py` under the `PYTHON.MAIN` folder. The code editor displays the following Python code:

```
1 friends=['ali', 'khizar', 'raza']
2
3 popped_friends=friends.pop(0)
4 print(friends)
5 print("invited on dinner tonight. " +friends[0])
6 print("invited on dinner tonight. " +friends[1])
7
```

The terminal at the bottom shows the command to run the script and its output:

```
PS C:\Users\Dell\Desktop\python.main> & C:/Users/Dell/AppData/Local/Programs/Python/Python311/python.exe c:/Users/Dell/Desktop/listing12.py
['khizar', 'raza']
invited on dinner tonight. khizar
invited on dinner tonight. raza
PS C:\Users\Dell\Desktop\python.main>
```



The screenshot shows the Visual Studio Code interface with a file explorer on the left and a code editor in the center. The file explorer shows the file `class.py` under the `PYTHON.MAIN` folder. The code editor displays the following Python code:

```
1 favorite_pizzas = ["pepperoni", "mushroom", "sausage"]
2
3 #Print the name of each pizza
4 print("My favorite pizzas are:")
5 for pizza in favorite_pizzas:
6     print(pizza)
7
8 #Print a sentence using the name of each pizza
9 print("\nI like:")
10 for pizza in favorite_pizzas:
11     print(f"- {pizza} pizza")
12
13 print("\nPizza is one of my favorite foods!")
14
```

The terminal at the bottom shows the command to run the script and its output:

```
My favorite pizzas are:
pepperoni
mushroom
sausage

I like:
- pepperoni pizza
- mushroom pizza
- sausage pizza

Pizza is one of my favorite foods!
```

```

class > ...
1  animals = ["dog", "cat", "rabbit"]
2
3  # Print the name of each animal
4  print("\nAnimals with a common characteristic:")
5  for animal in animals:
6      print(animal)
7
8  # Print a statement about each animal
9  print("\nAnimals and why they make great pets:")
10 for animal in animals:
11     if animal == "dog":
12         print("A dog is loyal and playful, making it a great companion.")
13     elif animal == "cat":
14         print("A cat is independent and low-maintenance, making it a great pet for busy people.")
15     elif animal == "rabbit":
16         print("A rabbit is cute and easy to care for, making it a great pet for families with children.")
17
18 print("\nAny of these animals would make a great pet!")
19

```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

```

Animals with a common characteristic:
dog
cat
rabbit

Animals and why they make great pets:
A dog is loyal and playful, making it a great companion.
A cat is independent and low-maintenance, making it a great pet for busy people.
A rabbit is cute and easy to care for, making it a great pet for families with children.

Any of these animals would make a great pet!
PS C:\Users\Dell\Desktop\python.main>

```

```

class > ...
1  # Generate a list of the first 10 cubes using a list comprehension
2  cubes = [x**3 for x in range(1, 11)]
3
4  # Print the list of cubes
5  print(cubes)
6

```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

```

PS C:\Users\Dell\Desktop\python.main> & C:/Users/Dell/AppData/Local/Programs/Python/Python311/python.exe c:/Users/Dell/Desktop/python.main/class
[1, 8, 27, 64, 125, 216, 343, 512, 729, 1000]
PS C:\Users\Dell\Desktop\python.main>

```



```
first  lists  class  X
class > ...
1  # Store the five basic foods in a tuple
2  foods = ('Pizza', 'Burger', 'Fries', 'Salad', 'Sandwich')
3
4  # Print each food using a for loop
5  print("Menu:")
6  for food in foods:
7      print("- " + food)
8
9
10 # Update the menu by replacing two items with different foods
11 foods = ('Pasta', 'Wrap', 'Fries', 'Salad', 'Soup')
12
13 # Print the updated menu using a for loop
14 print("\nRevised Menu:")
15 for food in foods:
16     print("- " + food)
17

PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL

- Burger
- Fries
- Salad
- Sandwich

Revised Menu:
- Pasta
- Wrap
- Fries
- Salad
- Soup
PS C:\Users\Dell\Desktop\python.main>
```