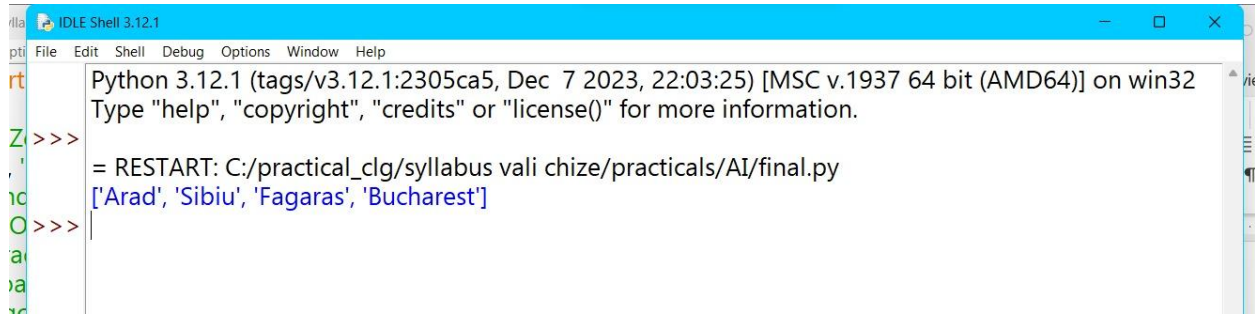


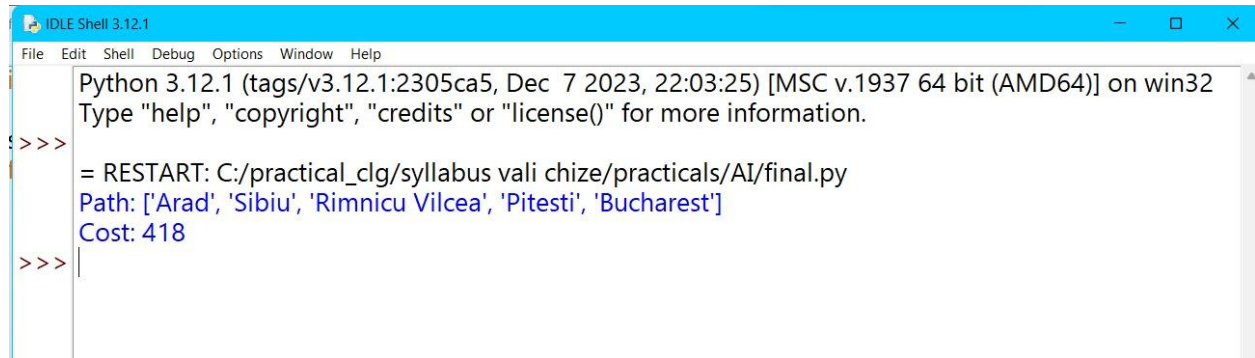
Practical No 1 output:



```
Python 3.12.1 (tags/v3.12.1:2305ca5, Dec 7 2023, 22:03:25) [MSC v.1937 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.

>>>
= RESTART: C:/practical_clg/syllabus vali chize/practicals/AI/final.py
['Arad', 'Sibiu', 'Fagaras', 'Bucharest']
>>>
```

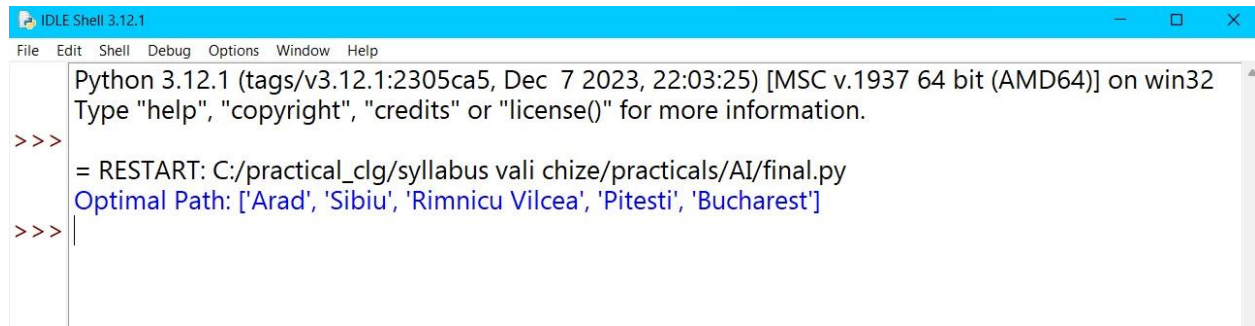
Practical No 2 output:



```
Python 3.12.1 (tags/v3.12.1:2305ca5, Dec 7 2023, 22:03:25) [MSC v.1937 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.

>>>
= RESTART: C:/practical_clg/syllabus vali chize/practicals/AI/final.py
Path: ['Arad', 'Sibiu', 'Rimnicu Vilcea', 'Pitesti', 'Bucharest']
Cost: 418
>>>
```

Practical No 3 output:



```
Python 3.12.1 (tags/v3.12.1:2305ca5, Dec 7 2023, 22:03:25) [MSC v.1937 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.

>>>
= RESTART: C:/practical_clg/syllabus vali chize/practicals/AI/final.py
Optimal Path: ['Arad', 'Sibiu', 'Rimnicu Vilcea', 'Pitesti', 'Bucharest']
>>>
```

Practical No 4 output:

```
IDLE Shell 3.12.1
File Edit Shell Debug Options Window Help
Python 3.12.1 (tags/v3.12.1:2305ca5, Dec 7 2023, 22:03:25) [MSC v.1937 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
= RESTART: C:/practical_clg/syllabus vali chize/practicals/AI/final.py
Path found: Arad -> Sibiu -> Fagaras -> Bucharest
>>>
```

Practical No 5 output:

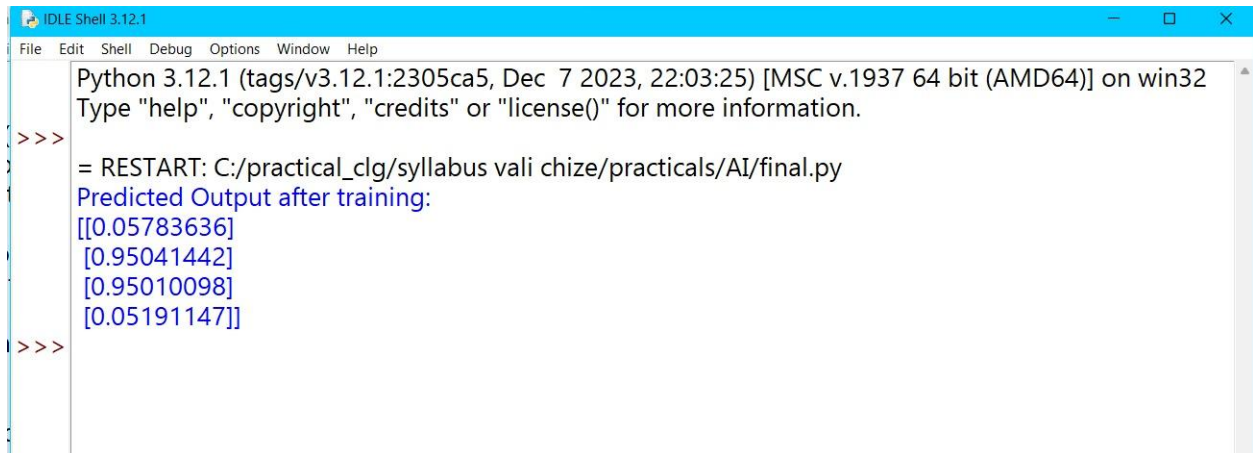
```
IDLE Shell 3.10.10
File Edit Shell Debug Options Window Help
Python 3.10.10 (tags/v3.10.10:aad5f6a, Feb 7 2023, 17:20:36) [MSC v.1929 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:\Study Material\prac5AI.py =====
0.7617774382480265
>>>
```

Practical No 6 output:

Practical No 7 output:

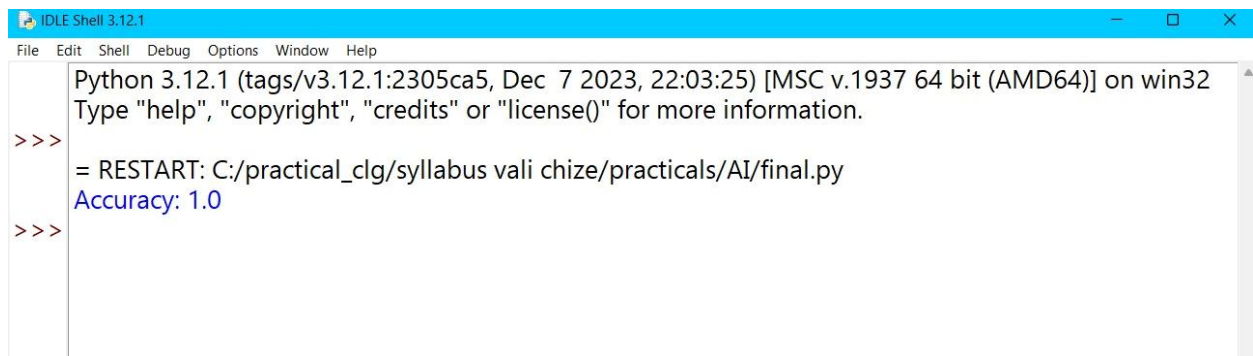
```
IDLE Shell 3.12.1
File Edit Shell Debug Options Window Help
Python 3.12.1 (tags/v3.12.1:2305ca5, Dec 7 2023, 22:03:25) [MSC v.1937 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
= RESTART: C:/practical_clg/syllabus vali chize/practicals/AI/final.py
Accuracy: 1.0
>>>
```

Practical No 8 output:



```
IDLE Shell 3.12.1
File Edit Shell Debug Options Window Help
Python 3.12.1 (tags/v3.12.1:2305ca5, Dec 7 2023, 22:03:25) [MSC v.1937 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
= RESTART: C:/practical_clg/syllabus vali chize/practicals/AI/final.py
Predicted Output after training:
[[0.05783636]
 [0.95041442]
 [0.95010098]
 [0.05191147]]
>>>
```

Practical No 9 output:



```
IDLE Shell 3.12.1
File Edit Shell Debug Options Window Help
Python 3.12.1 (tags/v3.12.1:2305ca5, Dec 7 2023, 22:03:25) [MSC v.1937 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
= RESTART: C:/practical_clg/syllabus vali chize/practicals/AI/final.py
Accuracy: 1.0
>>>
```