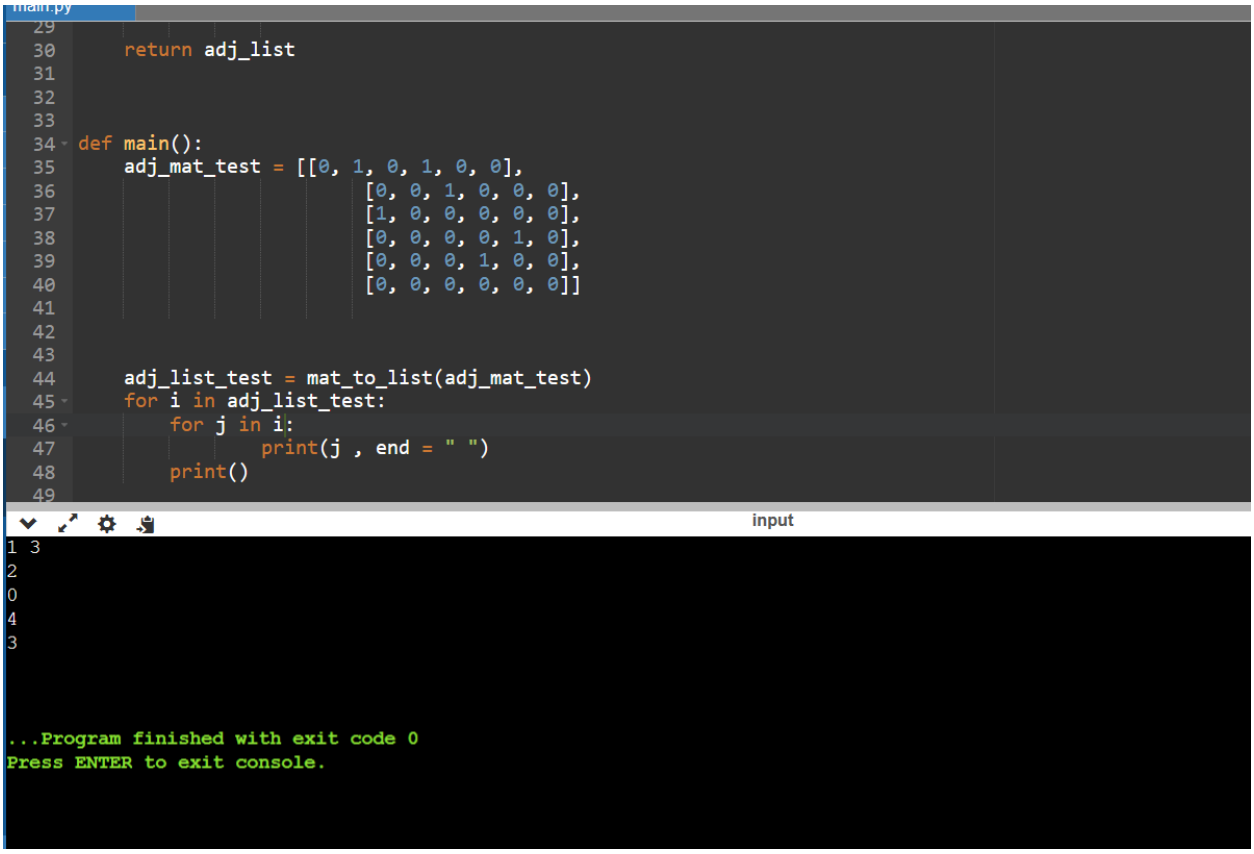
Unit tests of the python codes

Adjacency matrix to Adjacency list test:



```
    return adj_list


def main():
    adj_mat_test = [[0, 1, 0, 1, 0, 0],
                    [0, 0, 1, 0, 0, 0],
                    [1, 0, 0, 0, 0, 0],
                    [0, 0, 0, 0, 1, 0],
                    [0, 0, 0, 1, 0, 0],
                    [0, 0, 0, 0, 0, 0]]


    adj_list_test = mat_to_list(adj_mat_test)
    for i in adj_list_test:
        for j in i:
                print(j , end = " ")
        print()
```

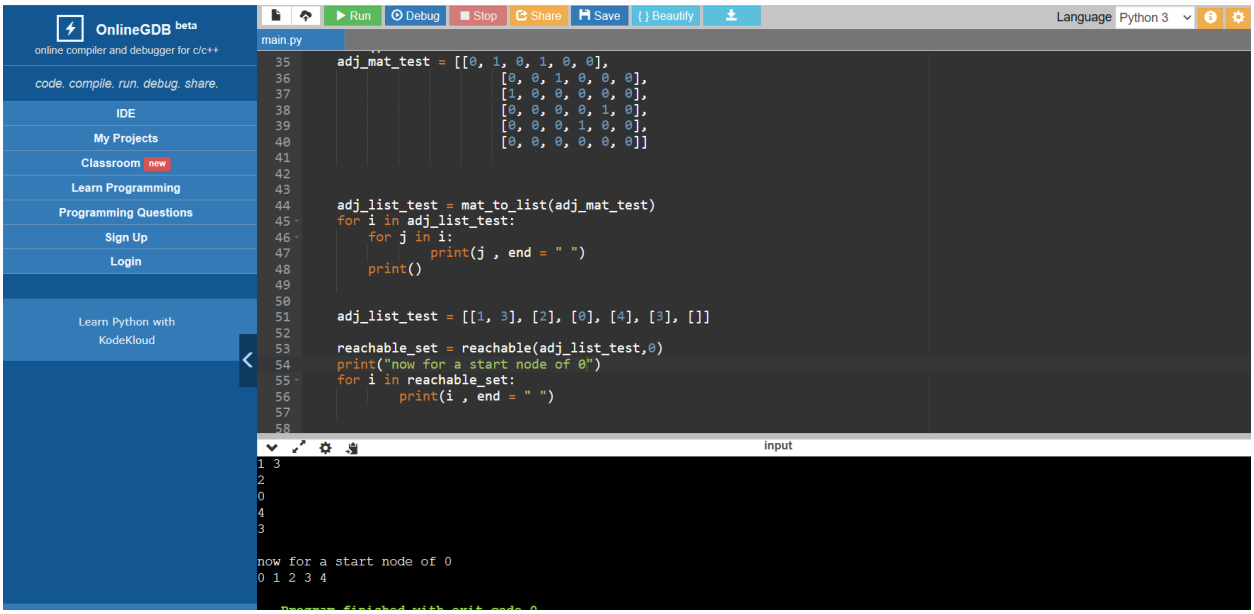
input

```
1 3
2
0
4
3



...Program finished with exit code 0
Press ENTER to exit console.
```

Test the reachable function:




```
adj_mat_test = [[0, 1, 0, 1, 0, 0],
                [0, 0, 1, 0, 0, 0],
                [1, 0, 0, 0, 0, 0],
                [0, 0, 0, 0, 1, 0],
                [0, 0, 0, 1, 0, 0],
                [0, 0, 0, 0, 0, 0]]


adj_list_test = mat_to_list(adj_mat_test)
for i in adj_list_test:
    for j in i:
            print(j , end = " ")
    print()


adj_list_test = [[1, 3], [2], [0], [4], [3], []]

reachable_set = reachable(adj_list_test,3)
print("now for a start node of 3")
for i in reachable_set:
        print(i , end = " ")
```

input

```
1 3
2
0
4
3

now for a start node of 3
3 4

...Program finished with exit code 0
Press ENTER to exit console.
```