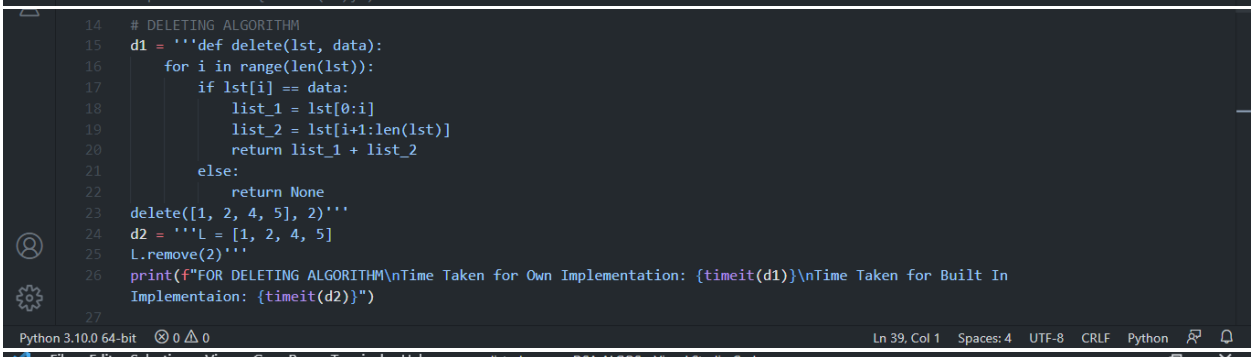

File Edit Selection View Go Run Terminal Help
list_alogs.py - DSA ALGOS - Visual Studio Code
list_alogs.py
tuple_algos.py
list_alogs.py > ...
from timeit import timeit
# FOR LIST
# INSERTING ALGORITHM
i1 = '''def insert(lst, pos, data):
list_1 = lst[0:pos]
list_2 = lst[pos:len(lst)]
list_1 += [data]
return list_1 + list_2
insert([1, 2, 3, 4, 5], 1, 255)'''
i2 = '''L = [1, 2, 3, 4, 5]
L.insert(1, 255)'''
print(f"FOR INSERTING ALGORITHM \nTime Taken for Own Implementation: {timeit(i1)}\nTime Taken for Built In Implementaion: {timeit(i2)}")


# DELETING ALGORITHM
d1 = '''def delete(lst, data):
for i in range(len(lst)):
if lst[i] == data:
list_1 = lst[0:i]
list_2 = lst[i+1:len(lst)]
return list_1 + list_2
else:
return None
delete([1, 2, 4, 5], 2)'''
d2 = '''L = [1, 2, 4, 5]
L.remove(2)'''
print(f"FOR DELETING ALGORITHM\nTime Taken for Own Implementation: {timeit(d1)}\nTime Taken for Built In Implementaion: {timeit(d2)}")
Python 3.10.0 64-bit
Ln 39, Col 1
Spaces: 4
UTF-8
CRLF
Python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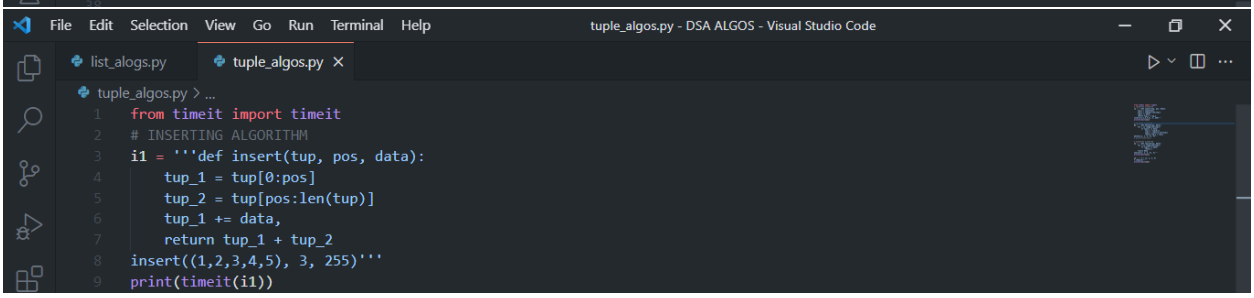
# SEARCHING ALGORITHM
s1 = '''def search(lst, data):
for i in range(len(lst)):
if lst[i] == data:
return i
return None
search([1, 2, 4, 5], 2)'''
s2 = '''L = [1, 2, 4, 5]
L.index(2)'''
print(f"FOR SEARCHING ALGORITHM \nTime Taken for Own Implementation: {timeit(s1)}\nTime Taken for Built In Implementaion: {timeit(s2)}")


File Edit Selection View Go Run Terminal Help
tuple_algos.py - DSA ALGOS - Visual Studio Code
list_alogs.py
tuple_algos.py
tuple_algos.py > ...
from timeit import timeit
# INSERTING ALGORITHM
i1 = '''def insert(tup, pos, data):
tup_1 = tup[0:pos]
tup_2 = tup[pos:len(tup)]
tup_1 += data,
return tup_1 + tup_2
insert((1,2,3,4,5), 3, 255)'''
print(timeit(i1))

```
# DELETING ALGORITHM
d1 = '''def delete(tup, data):
    for i in range(len(tup)):
        if tup[i] == data:
            tup_1 = tup[0:i]
            tup_2 = tup[i+1:len(tup)]
            return tup_1 + tup_2
delete((1, 2, 3, 4), 4)'''
# print(timeit(d1))
```

```
# SEARCHING ALGORITHM
s1 = '''def search(tup, data):
    for i in range(len(tup)):
        if tup[i] == data:
            return i
    return None
search((1, 2, 3, 4), 3)'''
print(timeit(s1))
s2 = '''T = (1, 2, 3, 5)
T.index(5)'''
print(timeit(s2))
```