

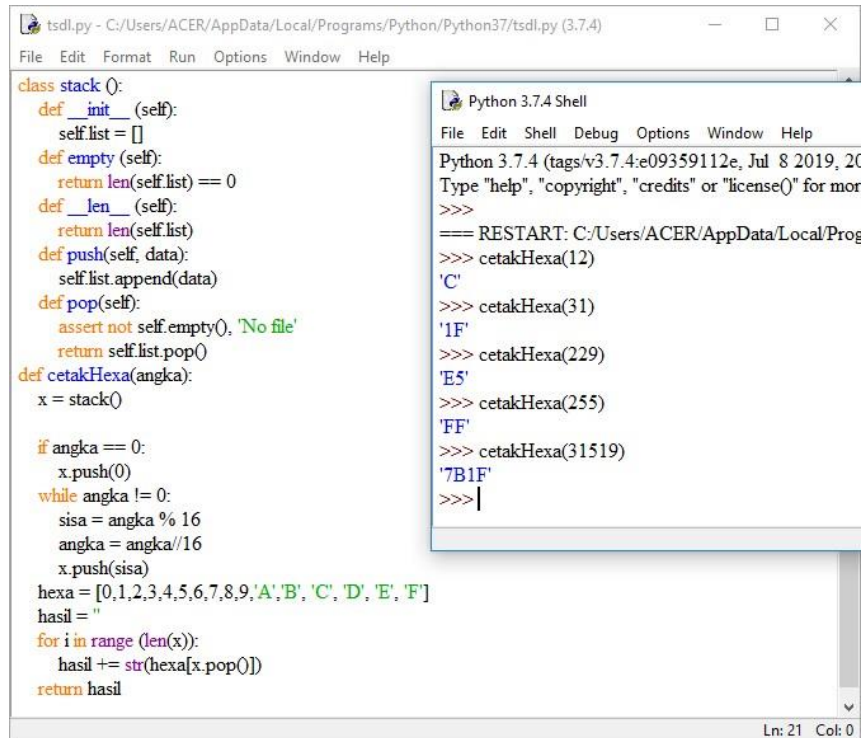
Nama : Bayu Aji Laksono

NIM : L200180089

Kelas : D

MODUL 8

NO 1.



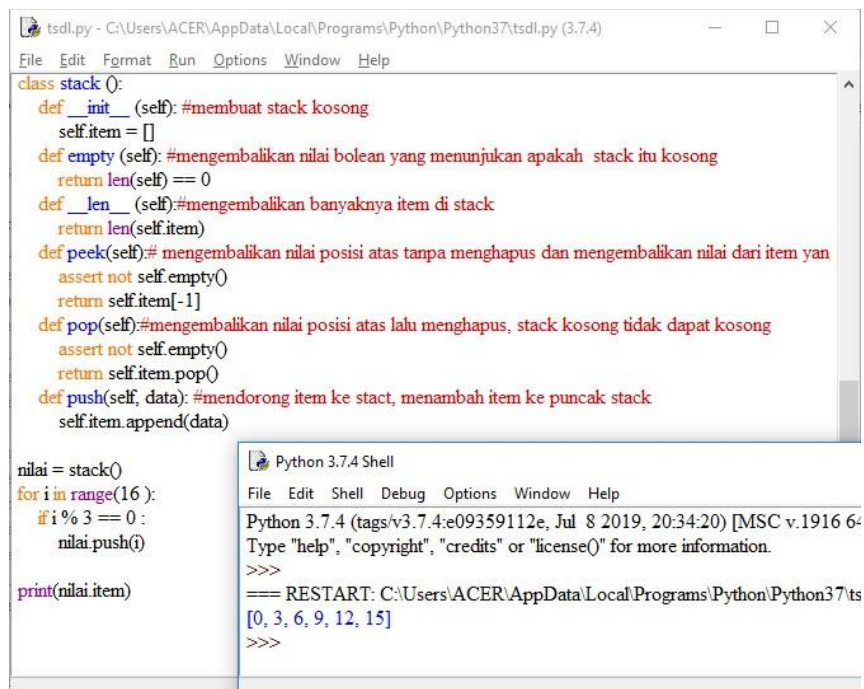
```
tsdl.py - C:/Users/ACER/AppData/Local/Programs/Python/Python37/tsdl.py (3.7.4)
File Edit Format Run Options Window Help

class stack():
    def __init__(self):
        self.list = []
    def empty(self):
        return len(self.list) == 0
    def __len__(self):
        return len(self.list)
    def push(self, data):
        self.list.append(data)
    def pop(self):
        assert not self.empty(), 'No file'
        return self.list.pop()
    def cetakHexa(angka):
        x = stack()

        if angka == 0:
            x.push(0)
        while angka != 0:
            sisa = angka % 16
            angka = angka // 16
            x.push(sisa)
        hexa = [0,1,2,3,4,5,6,7,8,9,'A','B','C','D','E','F']
        hasil = ""
        for i in range(len(x)):
            hasil += str(hexa[x.pop()])
        return hasil

Python 3.7.4 Shell
File Edit Shell Debug Options Window Help
Python 3.7.4 (tags/v3.7.4:e09359112e, Jul 8 2019, 20:34:20) [MSC v.1916 64-bit]
Type "help", "copyright", "credits" or "license()" for more
>>>
=== RESTART: C:/Users/ACER/AppData/Local/Programs/Python/Python37/Shell
>>> cetakHexa(12)
'C'
>>> cetakHexa(31)
'1F'
>>> cetakHexa(229)
'E5'
>>> cetakHexa(255)
'FF'
>>> cetakHexa(31519)
'7B1F'
>>> |
```

NO 2.



```
tsdl.py - C:/Users/ACER/AppData/Local/Programs/Python/Python37/tsdl.py (3.7.4)
File Edit Format Run Options Window Help

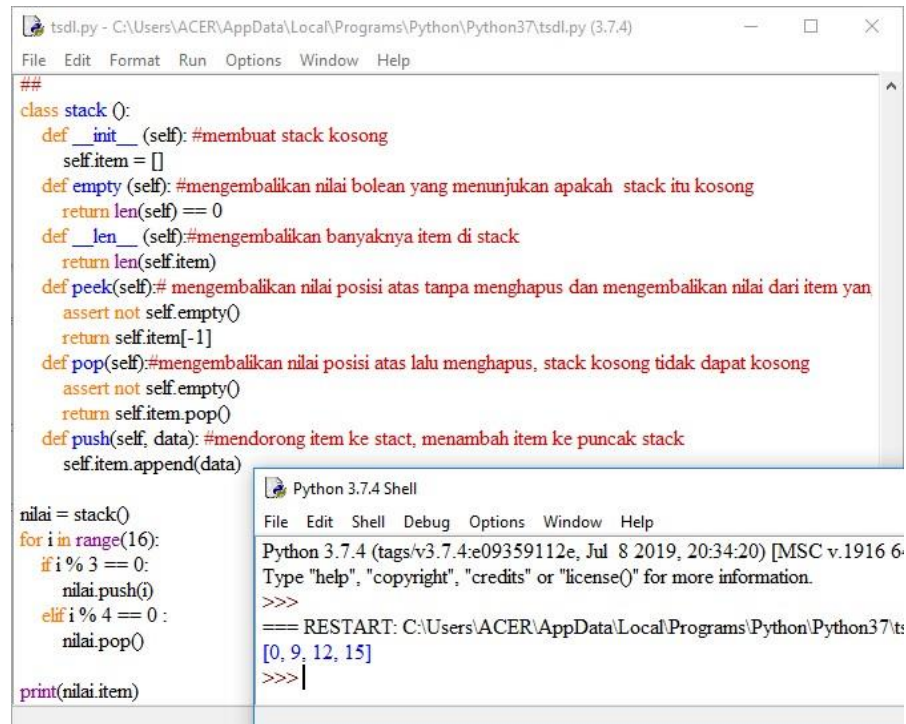
class stack():
    def __init__(self): #membuat stack kosong
        self.item = []
    def empty(self): #mengembalikan nilai boolean yang menunjukkan apakah stack itu kosong
        return len(self) == 0
    def __len__(self): #mengembalikan banyaknya item di stack
        return len(self.item)
    def peek(self): #mengembalikan nilai posisi atas tanpa menghapus dan mengembalikan nilai dari item yang
        assert not self.empty()
        return self.item[-1]
    def pop(self): #mengembalikan nilai posisi atas lalu menghapus, stack kosong tidak dapat kosong
        assert not self.empty()
        return self.item.pop()
    def push(self, data): #mendorong item ke stack, menambah item ke puncak stack
        self.item.append(data)

nilai = stack()
for i in range(16):
    if i % 3 == 0:
        nilai.push(i)

print(nilai.item)

Python 3.7.4 Shell
File Edit Shell Debug Options Window Help
Python 3.7.4 (tags/v3.7.4:e09359112e, Jul 8 2019, 20:34:20) [MSC v.1916 64-bit]
Type "help", "copyright", "credits" or "license()" for more
>>>
=== RESTART: C:/Users/ACER/AppData/Local/Programs/Python/Python37/Shell
>>>
[0, 3, 6, 9, 12, 15]
>>>
```

NO 3.



```
tsdl.py - C:\Users\ACER\AppData\Local\Programs\Python\Python37\tsdl.py (3.7.4)
File Edit Format Run Options Window Help

##
class stack():
    def __init__(self): #membuat stack kosong
        self.item = []
    def empty(self): #mengembalikan nilai boolean yang menunjukkan apakah stack itu kosong
        return len(self) == 0
    def __len__(self): #mengembalikan banyaknya item di stack
        return len(self.item)
    def peek(self): #mengembalikan nilai posisi atas tanpa menghapus dan mengembalikan nilai dari item yang
        assert not self.empty()
        return self.item[-1]
    def pop(self): #mengembalikan nilai posisi atas lalu menghapus, stack kosong tidak dapat kosong
        assert not self.empty()
        return self.item.pop()
    def push(self, data): #mendorong item ke stack, menambah item ke puncak stack
        self.item.append(data)

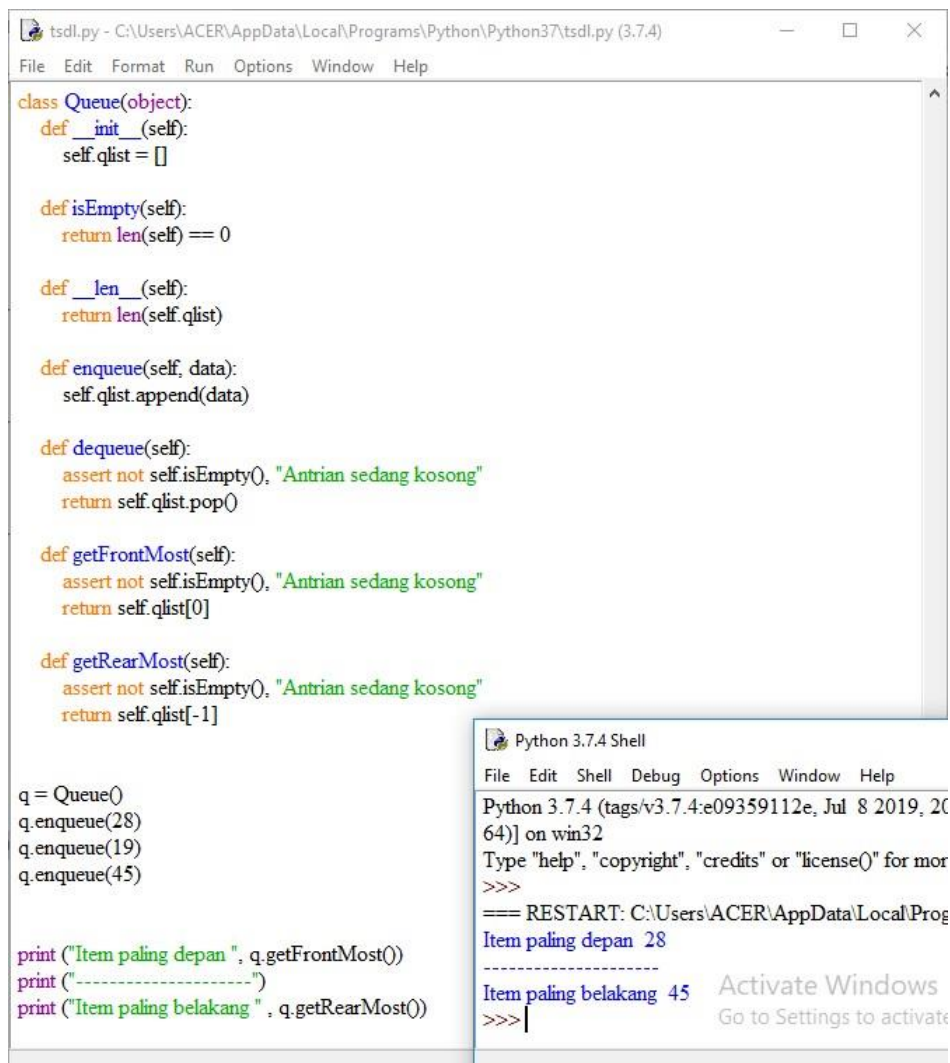
nilai = stack()
for i in range(16):
    if i % 3 == 0:
        nilai.push(i)
    elif i % 4 == 0:
        nilai.pop()

print(nilai.item)
```

```
Python 3.7.4 Shell
File Edit Shell Debug Options Window Help

Python 3.7.4 (tags/v3.7.4:e09359112e, Jul 8 2019, 20:34:20) [MSC v.1916 64-bit] on win32
Type "help", "copyright", "credits" or "license()" for more
>>>
== RESTART: C:\Users\ACER\AppData\Local\Programs\Python\Python37\tsdl.py ==
[0, 9, 12, 15]
>>>
```

NO 4.



```
tsdl.py - C:\Users\ACER\AppData\Local\Programs\Python\Python37\tsdl.py (3.7.4)
File Edit Format Run Options Window Help

class Queue(object):
    def __init__(self):
        self.qlist = []

    def isEmpty(self):
        return len(self) == 0

    def __len__(self):
        return len(self.qlist)

    def enqueue(self, data):
        self.qlist.append(data)

    def dequeue(self):
        assert not self.isEmpty(), "Antrian sedang kosong"
        return self.qlist.pop()

    def getFrontMost(self):
        assert not self.isEmpty(), "Antrian sedang kosong"
        return self.qlist[0]

    def getRearMost(self):
        assert not self.isEmpty(), "Antrian sedang kosong"
        return self.qlist[-1]

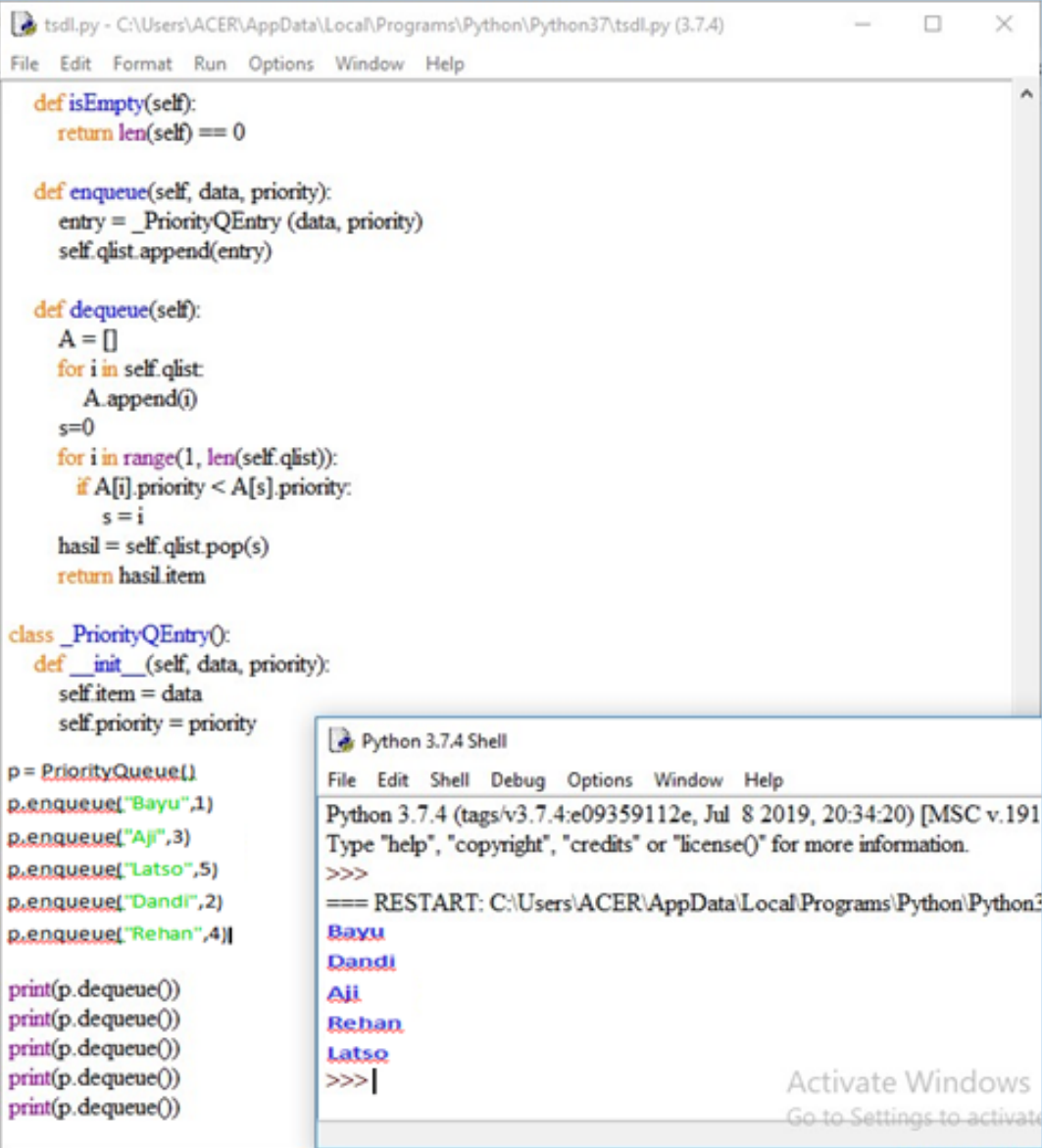
q = Queue()
q.enqueue(28)
q.enqueue(19)
q.enqueue(45)

print("Item paling depan ", q.getFrontMost())
print("-----")
print("Item paling belakang ", q.getRearMost())
```

```
Python 3.7.4 Shell
File Edit Shell Debug Options Window Help

Python 3.7.4 (tags/v3.7.4:e09359112e, Jul 8 2019, 20:34:20) [MSC v.1916 64-bit] on win32
Type "help", "copyright", "credits" or "license()" for more
>>>
== RESTART: C:\Users\ACER\AppData\Local\Programs\Python\Python37\tsdl.py ==
Item paling depan 28
-----
Item paling belakang 45
>>>
```

NO 5.



The image shows a Python IDE window titled 'tsdl.py - C:\Users\ACER\AppData\Local\Programs\Python\Python37\tsdl.py (3.7.4)'. The code defines a priority queue class and a test script. The test script creates a priority queue 'p' and enqueues five elements: 'Bayu' (priority 1), 'Aji' (priority 3), 'Latso' (priority 5), 'Dandi' (priority 2), and 'Rehan' (priority 4). It then dequeues all elements and prints them. A Python 3.7.4 Shell window is open, showing the execution of the script. The output of the dequeuing process is: Bayu, Dandi, Aji, Rehan, and Latso, which are printed on separate lines. The shell window also shows the standard Python 3.7.4 startup messages and a 'Restart' command.

```
def isEmpty(self):
    return len(self) == 0

def enqueue(self, data, priority):
    entry = _PriorityQEntry (data, priority)
    self.qlist.append(entry)

def dequeue(self):
    A = []
    for i in self.qlist:
        A.append(i)
    s=0
    for i in range(1, len(self.qlist)):
        if A[i].priority < A[s].priority:
            s = i
    hasil = self.qlist.pop(s)
    return hasil.item

class _PriorityQEntry():
    def __init__(self, data, priority):
        self.item = data
        self.priority = priority

p = PriorityQueue()
p.enqueue("Bayu",1)
p.enqueue("Aji",3)
p.enqueue("Latso",5)
p.enqueue("Dandi",2)
p.enqueue("Rehan",4)

print(p.dequeue())
print(p.dequeue())
print(p.dequeue())
print(p.dequeue())
print(p.dequeue())
```

```
Python 3.7.4 Shell
File Edit Shell Debug Options Window Help
Python 3.7.4 (tags/v3.7.4:e09359112e, Jul 8 2019, 20:34:20) [MSC v.191
Type "help", "copyright", "credits" or "license()" for more information.
>>>
== RESTART: C:\Users\ACER\AppData\Local\Programs\Python\Python3
Bayu
Dandi
Aji
Rehan
Latso
>>> |
```

Activate Windows
Go to Settings to activate