

lec4_step3_BarStack_Aligned_Stage2

November 30, 2022

```
[ ]: ## Python basics for novice data scientists, supported by Wagatsuma Lab@Kyutech
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#
# # @Time      : 2020-11-30
# # @Author    : Hiroaki Wagatsuma
# # @Site      : https://github.com/hirowgit/2A1\_python\_intermediate\_course
# # @IDE       : Python 3.9.14 (main, Sep 6 2022, 23:29:09) [Clang 13.1.6
    →(clang-1316.0.21.2.5)] on darwin
# # @File      : lec4_step3_BarStack_Aligned_Stage2.py
```

```
[1]: import numpy as np
#prFill=[90 60 50 50 50 90 40 30 80 40 20 ]/100;
prFill=np.array([90, 60, 50, 50, 50, 90, 40, 30, 80, 40, 20])
prFill=prFill/100
fillLine=np.full(len(prFill),True)
LineT=[]
k=0
for i in range(len(prFill)):
    if fillLine[i]:
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remF=1-prFill[i]
IDrem=np.where((prFill[i+1:-1]<=remF) & fillLine[i+1:-1])
tmp=i
fID=i
j=0
while IDrem[0].size > 0:
    fID=IDrem[0][0]+fID+1
    tmp=np.append(tmp,fID)
    remF=remF-prFill[IDrem[j][0]+i]
    IDrem=np.where((prFill[fID+1:-1]<=remF) & fillLine[fID+1:-1])
LineT.append(tmp)
fillLine[tmp]=False
print(k)
k=k+1

```

0
1
2
3
4
5
6
7

```

[2]: prFill=np.array([90, 60, 50, 50, 50, 90, 40, 30, 80, 40, 20])
prFill=prFill/100
fillLine=np.full(len(prFill),True)
LineT=[]
k=0

```

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[3]: i=1

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[2]: remF=1-prFill[i]
print(remF)
print(prFill)
IDrem=np.where((prFill[i+1:-1]<=remF) & fillLine[i+1:-1])
print(IDrem)
tmp=i
fID=i
j=0
print(IDrem)
IDrem[0].size

```

0.8
[0.9 0.6 0.5 0.5 0.5 0.9 0.4 0.3 0.8 0.4 0.2]

```
(array([], dtype=int64),)  
(array([], dtype=int64),)
```

```
[2]: 0
```

```
[12]: print(IDrem[0][0])  
      fID=IDrem[0][0]+fID  
      print(fID)
```

```
4  
5
```

```
[17]: print(LineT)
```

```
[0, array([1, 6]), array([2, 3]), array([4, 7]), 5, 8, 9, 10]
```

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[ ]:
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