

## ▼ lambda function

```
def wish():  
    print('good afternoon')
```

```
f = lambda : print('good afternoon')
```

```
wish()  
  
    good afternoon
```

```
f()  
  
    good afternoon
```

```
def test():  
    return 10  
  
print(test())  
  
    10
```

```
f = lambda : 10  
print(f())  
  
    10
```

```
def mytest(i):  
    return i  
  
print(mytest(100))  
  
    100
```

```
f = lambda i: i  
print(f(100))  
  
    100
```

```
def square(x):  
    return x**2
```

```
print(square(5))
```

25

```
f = lambda x: x**2  
print(f(5))
```

25

```
def getlist(s):  
    l = []  
    for i in s:  
        l.append(i)  
    else:  
        return l
```

```
print(getlist('python'))
```

['p', 'y', 't', 'h', 'o', 'n']

```
f = lambda s: [i for i in s]  
print(f('python'))
```

['p', 'y', 't', 'h', 'o', 'n']

```
def alternatchar(s):  
    l = []  
    for i in range(len(s)):  
        if i%2 == 0:  
            l.append(s[i].upper())  
        else:  
            l.append(s[i].lower())  
    else:  
        return l
```

```
print(alternatchar('python'))
```

['P', 'y', 'T', 'h', 'O', 'n']

```
f=lambda s:[s[i].upper() if i%2==0 else s[i].lower( ) for i in
print(f('python'))
```

```
['P', 'y', 'T', 'h', 'O', 'n']
```

```
...
```

```
[
  [0],
  [0,1],
  [0,1,2],
  [0,1,2,3],
  [0,1,2,3,4]
]
```

```
def createlist(x):
    l = []
    for i in range(x):
        temp = [] # nested list creation
        for j in range(i+1):
            temp.append(j)
        else:
            l.append(temp)
    else:
        return l
```

```
print(createlist(5))
```

```
[[0], [0, 1], [0, 1, 2], [0, 1, 2, 3], [0, 1, 2, 3, 4]]
```

```
f=lambda x:[[j for j in range(i+1)] for i in range(x)]
print(f(5))
```

```
[[0], [0, 1], [0, 1, 2], [0, 1, 2, 3], [0, 1, 2, 3, 4]]
```

```
...
```

```
[
  ['p'],
  ['p','y'],
  ['p','y','t'],
  ['p','y','t','h'],
  ['p','y','t','h','o'],
```

```
['p','y','t','h','o','n']  
]  
...
```

```
def newlist(s):
```

```
    l = []
```

```
    for i in range(len(s)):
```

```
        temp = []
```

```
        for j in range(i+1):
```

```
            temp.append(s[j])
```

```
        else:
```

```
            l.append(temp)
```

```
    else:
```

```
        return l
```

```
print(newlist('python'))
```

```
 [['p'], ['p', 'y'], ['p', 'y', 't'], ['p', 'y', 't', 'h'], ['p', 'y', 't', 'h', 'o'],
```



```
f=lambda s:[[s[j] for j in range(i+1)] for i in range(len(s))]
```

```
print(f('python'))
```

```
 [['p'], ['p', 'y'], ['p', 'y', 't'], ['p', 'y', 't', 'h'], ['p', 'y', 't', 'h', 'o'],
```

