Python training - lab 6

Functions - local variables

```python
def func():
    x = 7   # x is a local variable
    print('Value of x:', x)   # 7


x = 5
func()
print('Value of x:', x)   # 5
```

Functions - global variables

```python
def func():
    global x
    x = 7   # x is a global variable
    print('Value of x:', x)   # 7



x = 5
func()
print('Value of x:', x)   # 7
```

Functions - global variables

```python
def func():
    print('Value of x:', x)   # 5



x = 5
func()
print('Value of x:', x)   # 5
```

Functions - global variables

```python
def func():
    li = [14]   # we made li local variable
    li.append(24)
    print('Value of li:', li)
    di['Q'] = 111


li = [4, 5]
di = {'ab': 123, 'd': 78}
func()
print('Value of li:', li)
print('Value of di:', di)
```

Text formatting - old style

```python
x, y = 'portocala', 'ala'
m, n = 6, 7.8

print('%s bala %s' % (x, y))
print('%s # %i # %f' % (x, m, n))
print('%s # %f # %i' % (x, m, n))
print('%(p1)s # %(p2)i' % {'p2': m, 'p1': x})
print('%s display percent %%' % x)
```

Text formatting - new style

```
x, y = 'portocala', 'ala'
m, n = 6, 7.8

print('{} bala {}'.format(y, x))
print('{1} bala {0}'.format(y, x))
print('{p1} bala {p2}'.format(p2=y, p1=x))
print('{p1} {1} {p2}'.format(m, n, p2=y, p1=x))
print('Display {} accolades {{ }}'.format(y))
```

Text formatting - string interpolation (f-strings)

```
x, y, z = 'ala', 'bala', 'portocala'
m, n = 5, 6.456789

print(f'{x} {y} {z} !')
print(f'{x*2} {y:17} # {z:>15} !')
print(f'{x:_>8} {y:^17} # {z:+<5} !')
print(f'{n:7.4f} !')
print(f'Display accolades {{ }} ')

// accolades inside accolades
p, c = 5, '_'
print(f'{x:{c}>{p}}')
```

PEP 8

- PEP - Python Enhancement Proposal
- https://peps.python.org/pep-0008/
- Style guide for Python

```python
//code not PEP compliant
def Func(a = 9):
    if (a>8):
      print('not OK')


//code PEP compliant
def func(a=9):
    if a > 8:
        print('OK')
```