

```
## THIS FILE CONTAINS SEVERAL EXAMPLES ABOUT LOOPS(FOR AND WHILE),  
## "DECISION-MAKING STRUCTURE" AND COMBINATION OF DIFFERENT EXAMPLES  
## WHICH I TAUGHT YOU AT LAB .....
```

```
# example1
```

```
for letter in 'python':  
    print "Current letter is:", letter  
print '\n'
```

```
# example2
```

```
for veg in ['celery','mashrum','okra']:  
    print "current vegetable is:", veg
```

```
# example3
```

```
for i in range(6):  
    print i
```

```
# example4
```

```
for i in range(1,5):  
    print i
```

```
# example5
```

```
tuplist= [(1,2),(3,4),(5,6)]  
for (i,j) in tuplist :  
    print (i,j)
```

```
# example6
```

```
mix= [(1,2),3,'hi',[1,2],[1:'one',2:'two']]  
for k in mix:  
    print k
```

```
# example7
```

```
i=[1,'hi',(3,4),4.5]  
querry=[(3,4),3.14]  
for key in querry:  
    if key in i:  
        print key, 'was found'  
    else:  
        print key, 'was not found'
```

```
### example8 - tavola pitagorica
```

```
for mult in range (1,3):  
    for i in range (1,11):  
        print i, 'x', mult, '=', i*mult  
    print '\n'
```

```
# example9
```

```
a=0  
while a<13:  
    a=a+1  
    if a==5:  
        print ' because of continue statement "5" cannot be printed'
```

```
        continue
    if a==10:
        break
    print a
print 'sorry because of break statement, we could not print 10'

# example10
num=raw_input('please enter an integer:') # num=input('>'); #no need to use int(num)
num=int(num) # num=float(num)
if num<0:
    print 'the absolute value of',num,"is", -num
else:
    print 'the absolute value of',num,"is", num

# example11
list=['doctor','engineer','biologist','computer scientist']
answer=raw_input('Are you doctor, engineer,computer scientist or biologist?')
answer1=answer.lower()
if answer1 == list[0]:
    print ' oh, you are doctore, good for you !'
elif answer1 == list[1]:
    print 'you are engineer, poor people, change your job ASAP ;)'
elif answer1 == list[2]:
    print '''you are biologist, emmmm,
you are supposed to receive lots of money'''
elif answer1 == list[3]:
    print ' WOW, Catastrophe, I have nothing to say :) ;)'
else:
    print ' you did not give valid answer ;)'

# example12

print '''my name is %s and i'm %i years
old and i have %f Euro ''' % ('hossein',30,1550.5)

things={'book':'20 Euro','pen':'5 Euro','eraser':'2 Euro'}
order=raw_input('what do you want to purchase?')
if order== 'book':
    print 'It costs %s ' % things.get('book')
elif order== 'pen':
    print 'It costs %s ' % things.get('pen')
elif order== 'eraser':
    print 'It costs %s ' % things.get('eraser')
else:
    print ''' we haven't gor your item, Accept our apology
apology accepted ;) '''

# example13
things={'book':'20 Euro','pen':'5 Euro','eraser':'2 Euro'}
while True:
    sttuf=raw_input('what do you want to purchase? If not enter "exit"')
    sttuf1=sttuf.lower()
    if sttuf1== 'book':
```

```
    print 'It costs %s ' % things.get('book')
elif sttuf1== 'pen':
    print 'It costs %s ' % things.get('pen')
elif sttuf1== 'eraser':
    print 'It costs %s ' % things.get('eraser')
elif sttuf1=='exit':
    break
else:
    print ''' we haven't gor your item, Accept our apology
apology accepted ;) '''
```

# example14 # iteration variable is key of dictionary

```
dict={1:'hi',2:'eee'}
```

```
for i in dict:
```

```
    print i
```

# example15

```
#Initialize a dictionary
```

```
biostudents = {'Brock' : 'Nicole ', 'Robyn': 'Andy ',
               'Margaux': 'Lin He',
               'Nate': ' Drubin'}
```

```
print biostudents
```

Now lets **print** out dictionary

```
for student in biostudents:
```

```
    print ''' the family name of %s is %s and s/he is
very clever.''' % (student, biostudents[student])
```

```
print
```

s