PythonClass05-Examples

February 24, 2018

In [4]:
```
#Given a list of number, that may contains 0, positive and negative numbers,
#write program to add all the negative numbers and print out the sum;
#add all the positive numbers and print out the sum too.
#numbers = [4, 6, -2, 5, 0, 3, -9, 7, 1]
#positive numbers sum up : 4+6+5+3+7+1
#negative numbers sum up: (-2) + (-9)

numbers = [4, 6, -2, 5, 0, 3, -9, 7, 1]

sum_neg = 0
sum_pos = 0

#TODO:
for i in numbers:
   if i >= 0:
     sum_pos=sum_pos + i
   else:
    sum_neg = sum_neg + i

print("all positive numbers sum is:", sum_pos) #suppose to be 4+6+5+3+7+1=26
print("all negative numbers sum is:", sum_neg) #suppose to be (-2) + (-9)= -11
```

```
all positive numbers sum is: 26
all negative numbers sum is: -11
```

In [14]:
```
#range() funtion
#range(start, end)
#range(start, end, step)

# Don't use range function to print out odd numbers between 0 - 11
# hint: use "while" keyword

stuff = 1
while(stuff < 12):
    print(stuff)
    stuff = stuff + 2
```

```
1
3
5
7
9
11
```

In [20]:
```python
#Given a list of fruit_list =["apple", "banana", "watermelon", "kiwi", "papaya", "plu
#print out the colors: if it is apple, print red;
#if it is watermelon, print green,
#if it is banana, print yellow,
#if it is kiwi, print brown,
#if it is papaya, print orange.
#Else, print unknown

fruit_list=["apple", "banana", "watermelon", "kiwi", "papaya", "plum", "pear"]
for fruit in fruit_list:
    if fruit == "apple":
        print("APPLE = RED")
    elif fruit == "banana":
        print("BANANA = YELLOW")
    elif fruit == "watermelon":
        print("WATERMELON = GREEN")
    elif fruit == "kiwi":
        print("KIWI = BROWN")
    elif fruit == "papaya":
        print("PAPAYA = ORANGE")
else:
    print("UNKNOWN COLOR")
```

```
APPLE = RED
BANANA = YELLOW
WATERMELON = GREEN
KIWI = BROWN
PAPAYA = ORANGE
UNKNOWN COLOR
```

In [42]:
```python
#A college is going to have a basketball competition.
#There are 50 students joined cheerleaders team.
#Lisa wants to find out if her friend Ann is in the team.
#Print out yes if Ann is in the team.
cheerLeaders = ["John", "Lisa", "Raj", "Lily", "Sam", "Jennie", "Sally", "Yuna", "Sam
result = "Not found."
#TODO:
```

```
        #if Ann is in the list, change result to "Yes!"
        for i in cheerLeaders:
            if i=="Ann":
                print("Yes!")
                break

        #print(result)
```

```
Yes!
```

In [56]:
```
        #Print out all the numbers from 0 to 10, except 5.
        #use while
        i = 0
        while (i < 10):
            i=i+1
            if i == 5:
                 continue
            print(i)
```

```
1
2
3
4
6
7
8
9
10
```

In [50]:
```
        #end parameter in print()
        #print("*", end=" ")
        #print a triangle shape with *, 5 rows total
        #Output:
        #*
        #* *
        #* * *
        #* * * *
        #* * * * *

        rows = 5
        for i in range(1, rows+1):
            n = 0
            while(n != i):
                print("*", end=" ")
                n = n+1
            #print line break
            print()
```

```
*
* *
* * *
* * * *
* * * * *
```

```
In [52]: #1
         #2 2
         #3 3 3
         #4 4 4 4

         for i in range(1,5):
             for j in range(i):
                 print("*", end=" ")
             print()
```

```
*
* *
* * *
* * * *
```

```
In [53]: #* * * * *
         #* * * * *
         #* * * * *
         #* * * * *
         #* * * * *

         for meh in range(1, rows + 1):
             n = 0
             while(n != 5):
                 print("*",end=" ")
                 n = n + 1
             print()
```

```
* * * * *
* * * * *
* * * * *
* * * * *
* * * * *
```

```
In [55]: for i in range(1,6):
             for i in range(5):
                 print("*",end=" ")
             print()
```

```
* * * * *
* * * * *
```

```
* * * * *
* * * * *
* * * * *
```