

Introduction to Python II Exercises 02 (sample program answers)

Remember that you can come out with a different way to solve the exercises

At the beginning while you are getting acquainted with programming and Python as a language your objective is to produce a suitable RESULT. As you get more experience, you will be able to apply your python knowledge to write elegant code. But for the time being focus on the results.

```
import datetime

def extradays(mydate, xdays):
    daysdelta = datetime.timedelta(days = xdays)
    newdate = mydate + daysdelta
    return newdate

mydate = datetime.date.today()

daysdiff = 4

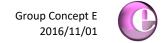
xdate = extradays(mydate, daysdiff)

print("From {} to {} there are {} extra days".format(mydate, xdate, daysdiff))
```

import datetime def datecomp(date1, date2): if date1 <= date2:</pre> before_test = True else: before_test = False days_diff = abs(date1 - date2) return before_test, days_diff.days first_date = input("Enter first date: ") second_date = input("Enter second date: ") first_date_d = datetime.datetime.strptime(first_date, "%Y/%m/%d") second_date_d = datetime.datetime.strptime(second_date, "%Y/%m/%d") before, days = datecomp(first_date_d, second_date_d) if before == True: print("{} is ealier or equal to {} and there are {} days in between".format(first_date, second_date, days)) else: print("{} is ealier or equal to {} and there are {} days in

between".format(first_date, second_date, days))





```
origList = [2,-5,4,6,0,-3,-4,7,8,-8,-7,-1,1]

#Assume o is positive and even

oddList = [x**2 for x in origList if x % 2 == 1 and x >= 0]

evenList = [x**2 for x in origList if x % 2 == 0 and x >= 0]

print("Odd List: {} ".format(oddList))
print("Even List: {} ".format(evenList))
```

```
sentence = input("Enter a sentence: ")
words = sentence.strip('.').split()
word_lengths = [len(word) for word in words if word.upper() != 'THE']
print(word_lengths)
#Notice how we use the upper() method of a string to catch any instance
# of "the" or "The"
```