



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.

1

```
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))
```

2

```
import datetime

def datecomp(date1, date2):
    if date1 <= date2:
        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))
```



```
4 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))
```

```
5 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"
```