Topics: Loop, Range, List, String, Dictionary

1. Sum the following series:

a.
$$1 + 3 + 5 + 7 + \dots$$
 Up to **n-th** term = ?

b.
$$2 + 4 + 6 + \dots + 2n = ?$$

c.
$$2 + 4 + 8 + \dots + n^2 = ?$$

d.
$$log(1) + log(2) + log(3) + + log(n) = ?$$

- 1. You have a group of 3 students. Each student has a name, ID and dept stored in a dictionary. And all 3 students are stored in a "students" dictionary. Now use a loop to iterate through the "students" dictionary and print only the "name" of all the students.
- 2. You have a list of students. Each student's information is stored using a dictionary.

ID	First Name	Last Name	Email	Year of Birth
1	Peter	Lee	plee@university.edu	1992
2	Jonathan	Edwards	jedwards@university.edu	1994
3	Marilyn	Johnson	mjohnson@university.edu	1993
6	Joe	Kim	jkim@university.edu	1992

Now write a python program to search a student by his/her ID. Use a loop and conditional so that this can also work on a big list of students.