

NAME _____

ICA-1

NetID _____@email.arizona.edu

Work with your neighbor. (This will be graded for participation only.)

1. Write a for loop that
 - a. prints the numbers from 100 to 0 in descending order by 2
 - b. prints every other element of `nums`, which is a list of integers
2. Write a function `get_words(s)` that takes a string `s` as an argument that consists of words separated by dashes. The function `get_words` returns a list of strings where each string in the list is one of the words in `s`. For example,

```
get_words('CS-120-Summer-2018-U-of-A')
```

returns

```
['CS', '120', 'Summer', '2018', 'U', 'of', 'A']
```

3. Write a function `sum_column(grid, offset)` that takes as arguments a grid of numbers and an offset and returns the result of summing the numbers on a specified column of grid. A grid is represented as a list of lists, as shown on the right, and offset 0 refers to the leftmost column (in the example shown: 11, 66, 22, 77, 33). You can assume that the argument `grid` is in fact a grid (i.e., a list of equal-length lists of numbers).

```
[[11, 22, 33, 44, 55],  
 [66, 77, 88, 99, 11],  
 [22, 33, 44, 55, 66],  
 [77, 88, 99, 11, 22],  
 [33, 44, 55, 66, 77]]
```

4. Write a function `print_some_words(filename, n)` that takes a filename as a string argument and for each line in the file, finds and prints the individual words of *length great than or equal to* `n` on a separate line.

A word is defined as a string of characters separated by white space. When considering words, the punctuation characters ". , ; ?" should be omitted. For example, if the file `poem.txt` consists of the following lines,

```
Two roads diverged in a yellow wood,  
And sorry I could not travel both  
And be one traveler, long I stood  
And looked down one as far as I could  
To where it bent in the undergrowth;
```

the function `print_some_words("poem.txt", 6)` would print the words below:

```
diverged  
yellow  
travel  
traveler  
looked  
undergrowth
```