

**CSE 303: Statistics for Data Science**  
**LAB 02 (Exercise)**  
**Course Instructor: Dr. Mohammad Rezwanul Huq**

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List Comprehension Problems

```
# Use for the questions below:
nums = [i for i in range(1,1001)]
string = "Practice Problems to Drill List
Comprehension in Your Head."
```

1. Find all of the numbers from 1–1000 that are divisible by 8
2. Find all of the numbers from 1–1000 that have a 6 in them
3. Count the number of spaces in a string (use string above)
4. Remove all of the vowels in a string (use string above)
5. Find all of the words in a string that are less than 5 letters (use string above)
6. Use a dictionary comprehension to count the length of each word in a sentence (use string above)
7. Use a nested list comprehension to find all of the numbers from 1–1000 that are divisible by any single digit besides 1 (2–9)
8. For all the numbers 1–1000, use a nested list/dictionary comprehension to find the highest single digit any of the numbers is divisible by

**Submission Instruction:**

**Create a zip file containing your python (.py) files along with the report. Name of the file should be: <your-student-id>\_Lab02.zip**

**Submit in the link given in the classroom.**