## Dr. Phloog's Class

Dr. Phloog teaches Python to extraterrestrials at Area 51. Each semester he gives a number of quizzes and he drops 1 out of 3 lowest grades. If he gives 3-5 quizzes, the lowest grade gets dropped before computing the average. If he gives 6-8 quizzes, the two lowest grades get dropped. He also gives letter-grades



based on an X, Y, Z scale where X represents an average score less than 80% (failing) and Z represents an average score greater than 90% (distinction). Any other grade is a Y (passing).

Write a function called **findGrade** (**grades**) that takes a list of quiz grades (grades) and returns the average and a letter grade based on Dr. Phloog's criteria. Your program must exclude the appropriate number of low grades, properly compute the average and the correct letter grade. I have provided a template for testing your function once you have developed it. USE THE TEMPLATE.

## **SOME HINTS:**

- 1. You should use floor division (//) on the length of the list to determine how many grades to exclude.
- 2. To exclude the lowest grades, begin by using the list **sort()** method. Then *slice* the list above the number of grades you wish to exclude.
- 3. To compute the average, iterate through the remaining grades and update a sum variable with each item. After having computed the sum, compute the average by dividing by the list length.
- 4. Simple comparisons are all that is necessary to find the letter grade from the average.
- 5. Note that in the template, two values are returned in parentheses. The parentheses form a "tuple" it is like a list but is "immutable".

Program to calculate grades for Dr. Phloog

80.00 --> Y 75.00 --> X 91.86 --> Z 79.86 --> X 85.17 --> Y