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%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
% This function receives a table of grades for different assignments with %
% the student IDs and their names and returns the same table, arranged %
% alphabetically, with an extra column with the calculated final grades, %
% called "Final" %
%
% Input:  An N x M matrix containing grades on the 7-step-scale given to %
%         N students on M different assignments. %
% Output: A vector of length n containing the final grade for each of %
%         the N students. %
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%

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function gradesFinal = computeFinalGrades(grades)

% Determine the number of rows and columns in the matrix
[N,M] = size(grades);
averageGrades = 1:N;

% If there is only one assignment the grade equals that assignment's grade
if M < 2
    averageGrades = reshape(grades , [1 , N]);
    gradesFinal = roundGrade(averageGrades);

% Otherwise we make a loop to calculate the average grades
else
    for i = 1:N
        % Assign a value a equal to the sorted row of grades
        a = sort(grades(i , :));

        % If all grades are larger than -3 the average is calculated the
        % usual way:
        if min(grades(i , :)) > -3

            % The average is the mean of the values in 'a' from 2 to last
            averageGrades(i) = mean(a( 2:length(a) ));

            % If one grade is -3 the average is -3
            elseif min(grades(i , :)) == -3
                averageGrades(i) = -3;
            end
        end
    end

% Display the rounded grades with the use of the function 'roundGrade'
gradesFinal = roundGrade(averageGrades);
end

```