

Practice Exercise: MS Excel Basics

The following is a post-class exercise for practicing Excel functionalities.

Note: This is neither a graded assessment nor has any time restraints for completion.

Case Study Number & Title	4. An exploratory analysis of nutrient composition of different cereals.
Introduction	
Learning Outcomes	
Background Information	The dataset consists of information about nutrient composition of 77 types of cereals. (If you like to eat cereal, do yourself a favor and avoid this dataset at all costs. After seeing this data, it will never be the same for me to eat Fruity Pebbles again.)
Scenario	
Problem Statement/ Business objectives	Understanding the nutrient composition of different cereals.
Data, Information for Case Analysis	<p>Data is provided as an xlsx file. Below is the source and attribute information.</p> <p>Source link: https://www.kaggle.com/datasets/crawford/80-cereals?resource=download</p> <p>Data Description</p> <p>mfr: Manufacturer of cereal</p> <ul style="list-style-type: none"> ● A = American Home Food Products ● G = General Mills ● K = Kellogg's ● N = Nabisco ● P = Post ● Q = Quaker Oats ● R = Ralston Purina <p>Type:</p> <ul style="list-style-type: none"> ● cold ● hot <ol style="list-style-type: none"> 1. calories: Calories per serving 2. protein: Grams of protein 3. fat: Grams of fat 4. sodium: Milligrams of sodium 5. fiber: Grams of dietary fiber 6. carbo: Grams of complex carbohydrates 7. sugars: Grams of sugars 8. potass: Milligrams of potassium 9. vitamins: Vitamins and minerals - 0, 25, or 100, indicating the typical percentage of FDA recommended. 10. shelf: Display shelf (1, 2, or 3, counting from the floor) 11. weight: Weight in ounces of one serving 12. cups: Number of cups in one serving 13. rating: Rating of the cereals

Questions	<ol style="list-style-type: none"> 1. Which cereal has the highest protein per cup? 2. Calculate the average gross protein per cup across all cereals. 3. Sort the cereal's calorie/protein ratio per cup in decreasing order. 4. Create a new column called "Protein status" wherein the "protein per cup values" would be "Low" if <5, "Medium" if <10, "High" >10 using a function. 5. Which cereal has a rating 40.45? Find out the index of the cereal using a function.
Solution	A sample solution also provided with the dataset
Deliverables for Solution and Rubric	Non-graded assessment
Key Takeaways/Results	Analyzing data using MS Excel and deriving meaningful insights which aids in decision making.