

Challenge

You have been given data of plants from which we are currently preparing our next R&D Product. Our team of Food Experts have finalized certain ranges of each Nutrient's Daily Value (DV). Your task here will be to see if you can find out the next optimal combination of plants.

Objective

Try to Score Maximum Points by combining plants the best way possible. Due to company's policy the real plant names have been changed.

Evaluation Method

Once you prepare the combination (i.e.: 2% Plant A, 54% Plant C, 20% Plant H, etc...), feed it in excel evaluator provided.

The primary evaluation of your formulation will be on how much Daily Value (DV) of a Nutrient can your combination provide in your final herb.

Once, we get the DV, points will be given according to this 2 cases:

1. Does it lie within the specified range of the Nutrient

	DV Range	
	Min	Max
Protein (g)	54.59	58.63
Calcium (mg)	5.49	6.27
Iron, Fe (mg)	28.07	39.30
Zinc, Zn (mg)	63.49	81.63
Copper, Cu (mg)	90.67	113.33
Mangnese (mg)	108.00	129.60
Vitamin C (mg)	83.33	100.00

2. If not, how far is it from the minimum DV Value required for that particular nutrient.

Nutrient	Permissible Limits from Minimum
Protein (g)	8
Calcium (mg)	1
Iron, Fe (mg)	5
Zinc, Zn (mg)	10
Copper, Cu (mg)	10
Manganese (mg)	30
Vitamin C (mg)	20

We have created an excel evaluator that will help you in evaluating your total score once you put in your combinations. You just need to find and implement an algorithm/method that can score the maximum points.

You can send us whatever amounts of combinations that you come out with, the best one from all will be selected as your final formulation.

Submission

As discussed before, you all are free to use any software. However, just keep on thing while submission. Whatever you submit, will be first tested on another set of data of different size, so make sure you enter all the comments.

Happy Hunting!!