

2. (6 marks) create a file q2.pl and write function

`greatestdiff(List1, List2, V)`

Assume List List1 and List2 are integer lists of equal length (and are not empty), V is the greatest difference from every pair of data at the same position.

Think of List1 and List2 as inputs, and V as an output.

For example: if List1 = {8,2,4,1,1},

List2 = {4,2,0,7,4}, the difference for each pair of data will be

{4,0,4,6,3}, and V, which is the maximum difference, will be 6.

An example run is as follows:

?- greatestdiff([11,0,1,16,20],[4,15,19,4,4],R).

R = 18 ;

false.

?- greatestdiff([9,10,1,6,10,3],[4,15,8,0,14,11],R).

R = 8 ;

false.