AQ5.3: Activity Question 3 - Not Graded

**This assignment will not be graded and is only for practice.**

**Note : This activity is only for practice purpose and it will not be counted towards the Final score**  
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[**Click here**](https://drive.google.com/drive/folders/1JBRSlac2hxKgfYLcoII7pGEd8g3fFi_q?usp=sharing)**to refer/view the data used:**  
  
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Let M, P**M, P** and C**C** represent the lists of students who have come within the top three scorers in Mathematics, Physics and Chemistry respectively. Additionally, we have the following information:  
  
 A math equation with black text

AI-generated content may be incorrect.  
  
**Using the above information to answer the questions 1 & 2.**

***1 point***

We have nested iterations to find the list of students who are among the top three scorers in both Mathematics and Physics. How many pairwise comparisons among the elements of the lists M**M** and P**P** are needed to determine this list of students?

X+Y*X*+*Y*

X−Y*X*−*Y*

X⋅Y*X*⋅*Y*

X/Y*X*/*Y*

***1 point***

Assume that we obtain a list K**K** that has students who are among the top three scorers in both Mathematics and Physics. We have nested iterations to find the list of students who are among top three scorers in all three subjects. How many pairwise comparisons among the elements of the lists K**K** and C**C** are required to determine this list of students? Assume that L=length(K)**L**=*length*(*K*).

L+Z*L*+*Z*

L−Z*L*−*Z*

L⋅Z*L*⋅*Z*

L/Z*L*/*Z*

***1 point***

Consider the “Score” dataset. The lists of sequence numbers of the top three students are in given below:  
  
 **Mathematics** = [14,11,23,20][14,11,23,20]  
 **Physics** = [11,23,7,9,18,5][11,23,7,9,18,5]  
 **Chemistry** = [14,11,18,25][14,11,18,25]  
  
 Which is the correct list of the sequence numbers of students which are among the top three in any of the two subjects?

[11,23,5][11,23,5]

[11,18,5,14][11,18,5,14]

[11,23,14,18][11,23,14,18]