Assumption: input file is provided with 600 question , 6 different tag (Tag1 – Tag6) , 3 Level with pipe delimiter

Input file

File exist or not

Show error message

NO

YES

Sufficient data is there or not ?

not

NO

Show error message

YES

Fetching the records from list based on random index and checking the required condition (1 question from each tag , 2 question from each level) and storing the records into array(like a bucket).

Once array size reached to 10 ,Increment the quiz Count

Read the data and store into list of object (separated by | delimiter)

Implementation

Iterating records - > 10 by 10 based on random number using for loop

Storing the records in array one by one

Before storing 10 records in and array, we should make sure that array records satisfy the below condition

* 1 question from each tag (checking questionCount ==(10-(6-tag size))
* 2 questions from each difficulty level
* 10 questions per quiz ( iterating over a for loop with condition i < QUIZ\_SIZE(10)

Info :

question list = No of question in input file ( eg : 600)

array = Set of 10 Question

tagList = Set of tag which are available in array

Question = A Single row ( Q1 | EASY | MEDIUM)

Eg :

if array length(quiz variable) is= 8

tagList length( tagsList variable) is =4 { Tag1 , Tag2,Tag4,Tag5}

From 0 to 7 index we will add the question to array ,tags value to tagList and remove the question from question list

* Fetching the question from question list is based on random value
* tags value will we added if it is not exist in tagList
* before reaching the index 9 tagList size should be 6

Once index reach to 8

We will follow the below process

Check Step :

In above example {Tag3,Tag6} are missing , so before adding the question to array we need to check if the question is having { Tag3 or Tag6} value

If Yes then we will add to tagList as well as add the question to array and remove the question from question list.

Again checking the Tag list length if is the not equal to 6 then again follow the

Check Step procedure.

At the end we will having array which containing the 10 question , based on array length we are incrementing the quiz count ;

After processing all the records we are displaying the quiz count

Note : if Quiz is having 58 records then we will process only 50 records since 6 quiz is incomplete (1 question missing) . So before generating one more quiz set we are checking if the quizList Is having 10 question or not !