**TASK 1 DRAFT**

#algorithm

OBJECTIVES

each topic is 1 excel file

each topic is 10 question

each question can have one or more correct answer

question display one at a time in console.

compute the points in percentage

**Phase 1: Information Gathering**

**Step 1:** Name Input

-> catch wrong format and reprompt if the given format is not followed.

**Step 2:** Subject Selection

-> reprompt if inputted Subject does not exist.

**Step 3:** Retrieve the specific question based on the selected subject.

-> Calculate the maximum question and make 3 variables: the maximum question, the possible points and the wrong answers.

**Step 4:** Display the percentage of the possible points that can be attained

-> possible points/maximum question \* 100 then the answer will be rounded to 2 decimal places.

**Step 5:** Initialize a variable question counter based on the question length - 1

-> The question counter will be used to instruct the computer which question is to be displayed

-> the minus 1 on question length is there because in excel file, there will be the title row which does

not contain the information we want, it just identifies which column has the question and answers.

**Step 6:** Do a while loop to iterate one question at a time.

-> while question counter == maximum question ask questions

**Phase 2: Question and Answer**

**Step 7:** Display Question(depending on the question counter displayed)

-> for example, the question counter has a value of 1, then the question 1 is displayed.

**Step 8:** Prompt users to answer

-> makes use of scanner, the accepted answer will be in form of A,B,C,D.

**Step 9:** Validate Answer

-> Check if the answer is correct

-> If answer is correct => retain the current possible points and the wrong answer variable.

-> Else if answer is wrong => deduct a point on the current possible points, add 1 on the wrong answer variable.

**Step 10:** Increment question counter to proceed to next question

-> question counter dictates what question to display

-> If question counter != question.length => Increment to proceed to next question

-> If question counter == question.length => End the question loop

**Step 11:** Calculate the possible points the person can achieve (in percentage)

-> not shown until the question loop is over.

-> possible points/maximum question \*100

-> round off the answer to 2 decimal places

-> The final calculated possible points will be the final score (the final percentage will have 2 decimal places round).

**Phase 3: Results**

**Step 12:** Take the input name, wrong answers, maximum question, and the final score.

-> The input name from the information Gathering

-> the total wrong answered throughout the loop

-> the maximum question

-> final score of the user (finalscore/maximumquestion \* 100) and rounded off to 2 decimal places.

**Step 13:** System out the following:

-> <Input Name> + ", You answered " + <maximum question - wrong answers> + "Right, " + <wrong answer> + "Questions wrong for"" a total of " + <maximum question> + ". You scored " + <final score>

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