**Title**: Lab #7: Looping Lab with both types of loops  
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**Description**: This program prompts the User for a score between 0 and 100 (inclusive), until the User enters a valid number in the specified range using a while loop. It then prompts for a second score until the User enters a valid number in the specified range, but using a do-while loop.

**Initial Algorithm**

Prompt for a score between 0 and 100 until it’s within range

Prompt for a second score between 0 and 100 until it’s within range

**Data Requirements**:

Input:

(int) score1 – This is the first score to be prompted

(int) score2 – This is the second score to be prompted

Output:

N/A

Additional Variables:

(final int) MIN\_SCORE – This is minimum score to be allowed (currently 0)

(final int) MAX\_SCORE – This is maximum score to be allowed (currently 100)

**Formulas**:

N/A

**Refined Algorithm**

Initialize score1 to MIN\_SCORE – 1 {not –1 in case MIN\_SCORE is changed later}

WHILE score1 < MIN\_SCORE OR score1 > MAX\_SCORE

Prompt for score1

IF score1 < MIN\_SCORE OR score1 > MAX\_SCORE THEN

Display error message

END IF

END WHILE

DO

Prompt for score2

IF score2 < MIN\_SCORE OR score2 > MAX\_SCORE THEN

Display error message

END IF

LOOP WHILE score2 < MIN\_SCORE OR score2 > MAX\_SCORE