Define "random\_list" function (receives "quaniy", "minimum" and "maximum" parameters)

Set "result" to an empty list

Repeat “quantity” times

Generate a random number between "minimum" and "maximum"

Add number to "result"

Return "result"

##############################################

Define “get\_question” function (receives “number” and “randomList” parameter)

Set question to empty string

IF number = 1

Set question to “What is the smallest number in this list?”, followed by “randomList”

ELSE IF number = 2

Set question to "What is the biggest number in this list?”, followed by “randomList”

ELSE IF number = 3

Set question to "What is the sum of the numbers in this list?”, followed by “randomList”

ELSE

Set question to "What is the average of the numbers in this list?”, followed by “randomList” and “(round UP to nearest integer)”

Return “question”

##########################################

Define “get\_correct\_answer” function (receives “number” and “randomList” parameters)

Set answer to None

IF number = 1

Set “answer” to minimum value in “randomList”

ELSE IF number = 2

Set “answer” to maximum value in “randomList”

ELSE IF number = 3

Set “answer” to sum of the numbers in “randomList”

ELSE

Set “answer” to average of the numbers in “randomList”

Return “answer”

########################################

Define “is\_ correct” function (receives “inputAnswer” and “correctAnswer” parameters)

Set isCorrect to False

IF “inputAnswer” = “correctAnswer”

Set “isCorrect” to True

Return “isCorrect”

#######################################

Display welcome message

Prompt user to select a difficulty

Endless Loop

IF difficulty is in [E, M, H]

Break out of loop

Re-prompt for difficulty

IF difficulty = “E”

Print “Easy difficulty selected!” message

ELSE IF difficulty = “M”

Print “Medium difficulty selected!” message

ELSE

Print “Hard difficulty selected!” message

SET questions to None

SET quantity to None

SET minimum to None

SET maximum to None

IF difficulty = "E"

SET questions to 2

SET quantity to 3

SET minimum to 1

SET maximum to 5

ELSE IF difficulty = "M"

SET questions to 4

SET quantity to 5

SET minimum to 3

SET maximum to 12

ELSE

SET questions to 6

SET quantity to 8

SET minimum to 10

SET maximum to 25

SET score to 0

For each question

Print question the user is up to out of the total number of questions

IF the user is not up to the final question

Generate a list of "quantity" random numbers between "minimum" and "maximum"

ELSE

Print "Challenge questions!" message

Generate a “randomList” of "quantity" random numbers between double the "minimum" and double the "maximum"

Generate a random “number” between 1 and 4

Print “get\_question(number, randomList)”

Set “correctAnswer” to “get\_correct\_answer(number, randomList)”

Prompt for “answer”

IF “answer” = “correctAnswer”

Print “Correct!” message

ELSE

Print “Incorrect” message, followed by correct answer

Print "Test complete!" message, followed by the "score" out of questions and the percentage that represent the score

IF score = questions

Print "Perfect score, well done!" message