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Pseudocode for Assignment 1

Import random package

Define system constant values

Define system requirement constants

Define show_question_answer(challenging=false) function with challenged parameter

 Call to select_question_no method and store value in question for question type identification

 If it is a challenging question

 Double directory min and max values

 If question is 1

 Call to random_list function with the parameters to get random generated array and store in my_list array

 Print instruction and my_list

 Get user answer and store it to answer param

 If user answer is correct

 Print Correct!

 Increase score and correct_answer by 1

 Else

 Print incorrect message and show correct answer

 If question 2

 Call to random_list function with the parameters to get random generated array and store in my_list array

 Print instruction and my_list

 Get user answer and store it to answer param

 If user answer is correct

 Print Correct!

 Increase score and correct_answer by 1

 Else

 Print incorrect message and show correct answer

 If question 3

 Call to random_list function with the parameters to get random generated array and store in my_list array

 Print instruction and my_list

 Get user answer and store it to answer param

```
    If user answer is correct
        Print Correct!
        Increase score and correct_answer by 1
    Else
        Print incorrect message and show correct answer
```

Else.

```
    Call to random_list function with the parameters to get random generated
    array and store in my_list array
    Print nstruction and my_list
    Get user answer and store it to answer param
```

Define select_requirement(parameter) function
Create empty my_options dictionary

```
    If parameter is e
        Assign my_options to requirement directory
    If parameter is m
        Assign my_options to requirement directory
    If parameter is h
        Assign my_option to requirement directory
```

Return my_options directory

Define random_list(qty, min, max) function
Return randomly generated list under the requirements given

Define select_question_no function
Return randomly generated number which is between 1 to 4

Show welcome message

Create difficult parameter

Endless loop:

```
    Prompt and assign user input
```

```
    If user entered e, m or h:
        Assign user input to difficult parameter
        Stop loop
```

```
    Else:
        Print invalid choice
```

Call to select_requirements(difficult parameter) to get required dictionary
Assign score, correct_answers and i parameters to 0

Loop until question counts are met

 Print question number

 Call to show_question_answer method and check the response

 If it is True

 Increase score and correct_answer by 1

 Increase i

Print challenging question

Call to show_question_answer method with challenging question parameter True

Print test completed message and required details in the programme