

Define the Problem:

The user has just arrived at a new planet and is ready to go search for inventory items, only the user must solve a puzzle to progress. The puzzle will test a user's mathematic skill. Asking the user for three random numbers (between 1-50) then presenting an equation and asking for the answer if the user answers correctly they will be allowed to move on. Answer incorrect and be forced to retry.

Random int one input:

Random int two input:

Random int three input:

Define Test Matrix:

solvePuzzle Test Matrix								
	Test Cases							
	Valid	Invalid			Boundary			
	1	2	3	4	5	6	7	X
Inputs								
RandomIntOne	10	-1	51	60	1	50	1	X
RandomIntTwo	10	20	40	100	1	50	50	X
RandomIntThree	10	40	1	89	1	50	2	
Answer	90	—	—	—	3	50	49	
Outputs								
randomEquation	10-10*10	ERROR	ERROR	ERROR	1+1+1	50+50-50	1+50-2	X
Error	Correct. Have a nice visit.	No negative numbers. Try again.	Oops you have a number not in the range.	Try following the instructions for number inputs.	Correct. Have a nice visit.	Correct. Have a nice visit.	Correct. Have a nice visit.	X

`solvePuzzle(userInput1, userInput2, userInput3) : int`

Three inputs will be received from the user which will form into an equation with random operators (ie. $2+2/2=?$). The user will be required to answer the question correctly.

If the userInput1 input is a negative number or over 50, then it will RETURN and error message and user will be prompted with message and to reenter a number within the range.

If the userInput2 input is a negative number or over 50, then it will RETURN and error message and user will be prompted with message and to reenter a number within the range.

If the userInput3 input is a negative number or over 50, then it will RETURN and error message and user will be prompted with message and to reenter a number within the range.

System will display a random equation comprised of the numbers the user selected. The user must answer correctly or be forced to retry.

Upon correct answer, the user will be congratulated and be able to proceed.