Quiz 020712 MATLAB QUIZ

Start a function file named email\_quiz020712.m which you will mail to the instructor at the end of the quiz.

Within this file, write a subfunction called generate\_random(n,a,b,s) where the routine returns a vector of “n” random numbers between “a” and “b” with a spacing of “s”. Thus generate\_random(5,1,3,0.5) could generate

[1 ,2 ,2.5 ,3 , 2.5]

Use your quiz function file to produce output for the following case: First generate a set of 10 numbers between 1 and 5 spaced by 0.5’s. Then, add to the end of that vector a set of 5 numbers between 10 and 50 spaced by 2’s. Typical output might be:

 part(a) part(b)

|  |  |
| --- | --- |
| x = 3.5000 3.5000 3.5000 2.5000 3.0000 2.0000 3.5000 1.5000 3.5000 1.5000 | x = 3.5000 3.5000 3.5000 2.5000 3.0000 2.0000 3.5000 1.5000 3.5000 1.5000 24.0000 34.0000 40.0000 12.0000 46.0000 |

Solution

function [] = placetd\_quiz02071210 ()

a=1;

b=5;

s=0.5

n=10;

x = generate\_random(n,a,b,s)

a=10;

b=50;

s=2;

n=5;

x=[x;generate\_random(n,a,b,s)]

end

function x = generate\_random(n,a,b,s)

x= a+fix(((b-a)/s+1)\*rand(n,1))\*s;

end