

As MATLAB R2020b outputs values to 4 decimal places, the use of 'format long' allows the output values to display all digits.

```
format long
```

Implementation for data sets into array for graphic plotting.

```
x = [0, 0.05, 0.10, 0.15, 0.20, 0.25]
```

```
x = 1x6
      0    0.050000000000000    0.100000000000000    0.150000000000000 ...
```

```
A = [0, 1.969, 1.922, 1.900, 1.890, 1.890]
```

```
A = 1x6
      0    1.969000000000000    1.922000000000000    1.900000000000000 ...
```

```
E = [0, 3.9125, 3.9205, 3.931, 3.942, 3.953]
```

```
E = 1x6
      0    3.912500000000000    3.920500000000000    3.931000000000000 ...
```

```
H = [0, 3.054, 3.1635, 3.275, 3.3898, 3.507]
```

```
H = 1x6
      0    3.054000000000000    3.163500000000000    3.275000000000000 ...
```

Using the hold on/ hold off function, the graph will source multiple data arrays before holding off on plotting the graph.

```
figure()
plot(x,A,'b')
hold on
plot(x,E,'r');
hold on
plot(x,H,'g');
xlabel('Step Size (x)');
ylabel('Solution Values');
title('Comparison of Analytically, Eulers and Huens Methods Solutions');
legend('Analytically','Eulers Methods','Huens Method');
hold off
```

