Assignment 2

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***Problem Set 3***

**Problem Set 3-1:**

Enter the matrices:

% a. Define the row vector a as the first row of matrix A, by selecting

the elements from A

a = A(1,:)

% b. Define the column vector b as the first column of matrix B, by

selecting the elements from B

b = B(1,:)

% c. Define scalar c as the element in row 2, column 3 of matrix B,

by selecting the element from B.

c = B(2,3)

% d. Define the submatrix C as the 2 x 2 upper-left submatrix of A, by

selecting the elements from A.

C = A(1:2,1:2)

% e. Construct a row vector x, consisting of: 1, 1.08, 1.16, …, 1.88

x = [1:0.08:1.88]

% f. Construct a column vector y that is the transpose of vector x.

x'

**Results**

**a)**

A =

2 3 7

1 2 0

4 1 5

**b)**

B =

1 0 9

2 1 4

3 1 2

**c)**

a =

2 3 7

b =

1 0 9

c =

4

**d)**

C =

2 3

1 2

**e)**

x =

Columns 1 through 6

1.0000 1.0800 1.1600 1.2400 1.3200 1.4000

Columns 7 through 12

1.4800 1.5600 1.6400 1.7200 1.8000 1.8800

**f)**

ans =

1.0000

1.0800

1.1600

1.2400

1.3200

1.4000

1.4800

1.5600

1.6400

1.7200

1.8000

1.8800

**Problem Set 3-2:**

Enter the vectors:

% a. concatenate x and y so that y is to the left of x

[y,x]

% b. concatenate x and y so that y is underneath x

[x;y]

**Results**

a) ans =

3 1

4 2

b) ans =

1

2

3

4

**Problem Set 3-3:**

Create a new matrix, A\_new, containing only the 1st and 2nd rows

of the given matrix A (from problem 1), by deleting row 3 of A.

A = [2,3,7;1,2,0;4,1,5]

A(3,:) = [];

A\_new = A

**Results**

A =

2 3 7

1 2 0

4 1 5

A\_new =

2 3 7

1 2 0