

EOSC 211 – Week 3 – Worksheet 1 – Data Structures

Group #:
Name:

Exercise 1: Write MATLAB code to...

1. Create a column (5x1) matrix **var1** with the elements 1.1, 2.2, 3.3, 4.4, 5.5
2. Create a row (1x3) matrix **var2** with the numbers 10 to 12.
3. Create a 2x3 matrix **var3** with numbers 101-103 (first row) and 201-203 (second row)
4. Create an empty array **var4**
5. Create a row (1x1000) vector **var5** containing the numbers 2400 to 3399
6. Create a string variable **str1** containing the word "class".

Exercise 2: What are the results of the following (using variables from Exercise 1)?

1. `bvar1=var1(3)`
2. `bvar2=var2(2)`
3. `bvar3=var1([1 2 3])`
4. `ii=[1 2 5]; bvar4=var1(ii)`

EOSC 211 – Week 3 – Worksheet 1 – Data Structures

5. `bvar5=var3(2,2)`
6. `bvar6=var3([1 2],2)`
7. `bvar7=var3([1 2],[2 3])`
8. `bvar8=var3(4)`
9. `bvar9=var2(:)`
10. `bstr1=str1(3:4)`
11. `bvar10=var1(var1(2))`
12. `bvar11=var1(3); bvar11=var1(4)`
13. `bvar12=var1(1,5)`
14. `bvar13=var1(5,1)`
15. `bvar14=var2(1,3)`
16. `bvar15=var2(3,1)`
17. `bvar16=[]; bvar16(2:4)=var3(1, :)`

Exercise 3: What is printed to the screen when you enter the following?

1. `B={'sky' , 3.4 , [2 4 5]}; B{1}(2)`
2. `A.var1={8 , 30, 'R' }`
`A.var2=2`
`A.var3=A.var1{A.var2}`