

MFE 431: Statistical Arbitrage

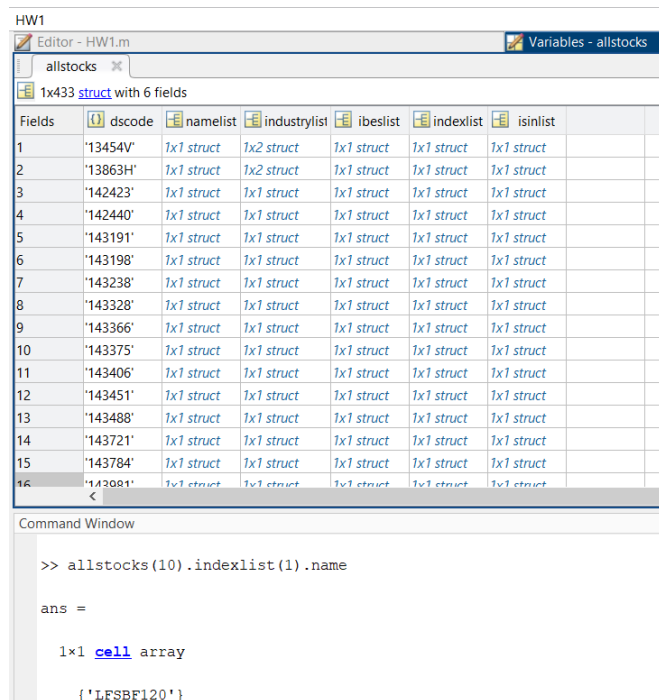
Problem Set 1

Group Québec

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Problem 1 Universe

We have retrieved data from DataStream Excel and then import into MATLAB. We then create a Matlab structured array of dimension $(1 \times n)$ with $n = 433$.

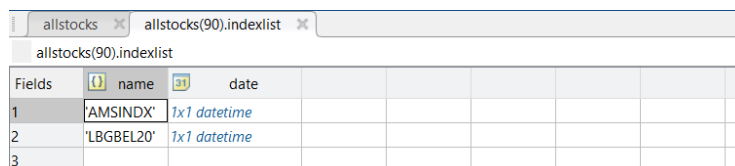


The image shows a MATLAB interface with a variable browser and a command window. The variable browser displays 'allstocks' as a 1x433 struct with 6 fields: dscode, namelist, industrylist, ibeslist, indexlist, and isinlist. The command window shows the command `>> allstocks(10).indexlist(1).name` and the output `ans = 1x1 cell array {'LFSBF120'}`.

Fields	dscode	namelist	industrylist	ibeslist	indexlist	isinlist
1	'13454V'	1x1 struct	1x2 struct	1x1 struct	1x1 struct	1x1 struct
2	'13863H'	1x1 struct	1x2 struct	1x1 struct	1x1 struct	1x1 struct
3	'142423'	1x1 struct	1x1 struct	1x1 struct	1x1 struct	1x1 struct
4	'142440'	1x1 struct	1x1 struct	1x1 struct	1x1 struct	1x1 struct
5	'143191'	1x1 struct	1x1 struct	1x1 struct	1x1 struct	1x1 struct
6	'143198'	1x1 struct	1x1 struct	1x1 struct	1x1 struct	1x1 struct
7	'143238'	1x1 struct	1x1 struct	1x1 struct	1x1 struct	1x1 struct
8	'143328'	1x1 struct	1x1 struct	1x1 struct	1x1 struct	1x1 struct
9	'143366'	1x1 struct	1x1 struct	1x1 struct	1x1 struct	1x1 struct
10	'143375'	1x1 struct	1x1 struct	1x1 struct	1x1 struct	1x1 struct
11	'143406'	1x1 struct	1x1 struct	1x1 struct	1x1 struct	1x1 struct
12	'143451'	1x1 struct	1x1 struct	1x1 struct	1x1 struct	1x1 struct
13	'143488'	1x1 struct	1x1 struct	1x1 struct	1x1 struct	1x1 struct
14	'143721'	1x1 struct	1x1 struct	1x1 struct	1x1 struct	1x1 struct
15	'143784'	1x1 struct	1x1 struct	1x1 struct	1x1 struct	1x1 struct
16	'143981'	1x1 struct	1x1 struct	1x1 struct	1x1 struct	1x1 struct

```
>> allstocks(10).indexlist(1).name  
  
ans =  
  
1x1 cell array  
  
{'LFSBF120'}
```

We have identified that some stocks have two or three index membership, e.g. 30939T (GALAPAGOS)



The image shows a MATLAB variable browser with the variable 'allstocks(90).indexlist' selected. It displays a table with 3 rows and 2 columns: 'name' and 'date'.

Fields	name	date
1	'AMSINDX'	1x1 datetime
2	'LBGBEL20'	1x1 datetime
3		