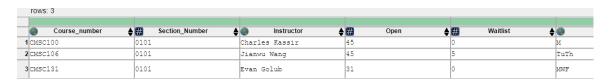
Lab 4 Submission

Data Wrangler Script and Screenshot: CMSC

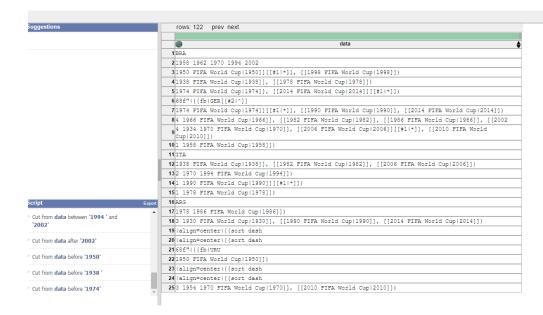


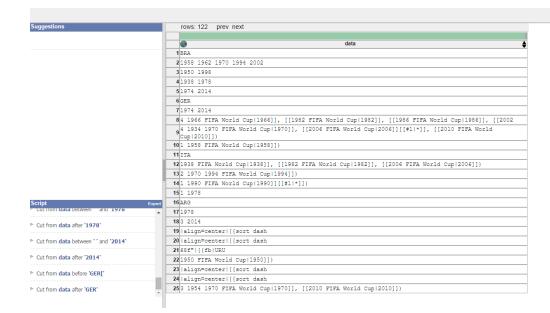
Open	♦ ##	Waitlist	\$	Days	\$	Time	\$	Building	♦ ##	Room_No.
	0		М		4:0	00pm - 4:50p	om CSI		2117	
	5		TuTh		9:3	30am - 10:45	Sam CSI		2117	
	0		MWF		2:0	00pm - 2:50p	om CSI		1115	

Course_number	♦ # Section_Number		♦ ∰	Open	♦ ##	Waitlist	♦ 🚳	
1 CMSC100	0101	Charles Kassir	45		0		М	
2 CMSC106	0101	Jianwu Wang	45		5		Tu	
3 CMSC131	0101	Evan Golub	31		0		MW	
4 CMSC132	0101	Laurence Herman	34		2		MM	
5 CMSC216	0101	Nelson Padua-Perez	28		0		Tu	
6 CMSC250	0101	Clyde Kruskal	29		4	4		
7 CMSC250	0101	Thomas Goldstein	25		0		Tı	
8 CMSC289	MSC289 0101		60		36	36		
9 CMSC330	0101	Chau-Wen Tseng	27		0		Ti	
10 CMSC351	0101	Hamid Mahini	88		2		MV	
11 CMSC396	0101	Atif Memon , Neil Spr	ing 25		0		W	
12 CMSC411	0101	Michelle Hugue	45		3		Tı	
13 CMSC 412	0101	Neil Spring	25		4		Tı	
14 CMSC 414	0101	A.U. Shankar	40		6		Ti	
15 CMSC417	0101	Ashok Agrawala	40		0		Ti	
16 CMSC420	0101	Hanan Samet	40		0		Ti	
17 CMSC421	0101	Donald Perlis	50		2		Ti	
18 CMSC423	0101	Hector Corrada Bravo	48		0		MV	

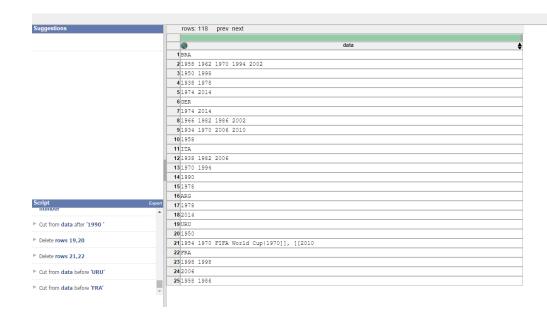
Data Wrangler Script and Screenshot: World Cup 1



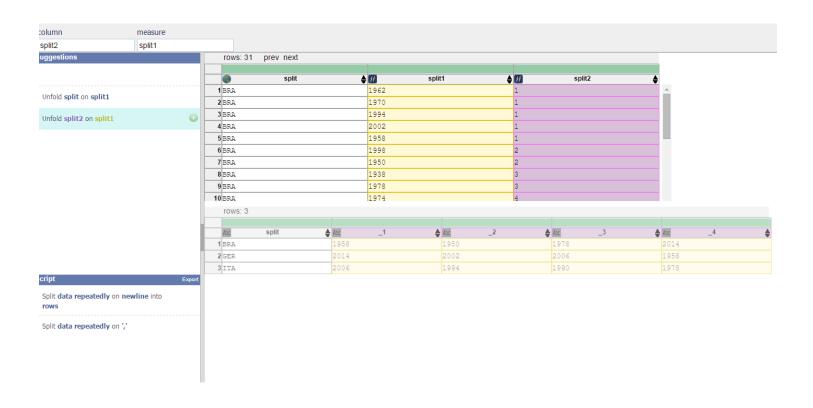


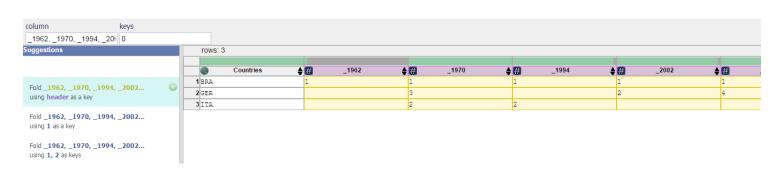


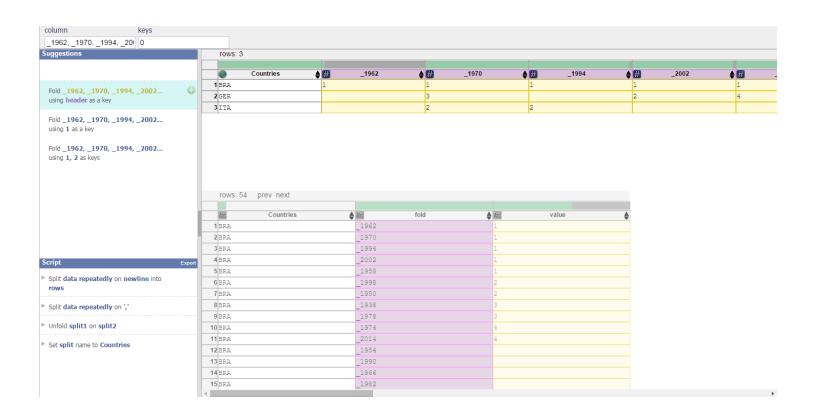
gestions	rows: 122 prev next								
gesuoris	Tows. 122 prev flext								
	data								
	1BRA								
	2 1958 1962 1970 1994 2002								
	3 1950 1998								
	4 1938 1978								
	5 1974 2014								
	6 GER								
	7 1974 2014								
	8 1966 1982 1986 2002								
	9 1934 1970 2006 2010								
	10 1958								
	11 ITA								
pt E	12 1938 1982 FIFA World Cup 1982]], [[2006								
ut from data after '2010 '	13 2 1970 1994								
actioni data arter 2010	14 1 1990 FIFA World Cup 1990]][[#1 *]])								
t from data before '1958'	15 1 1978								
	16 ARG								
it from data after '1958 '	17 1978								
t from data on ' any word World any	18 3 2014								
ord any number]]\)'	19 align=center {{sort dash								



Data Wrangler Script and Screenshot: World Cup 2







UNIX Tools Command: CMSC

Or to try another way of formatting (still looks ugly though...)

cat cmsc.txt | awk -F'[,\)]' 'BEGIN {print "Course No.,\tSection No.\tInstructor\t\tSeats\t\tOpen\t\t\tWaitlist\tDays Time\t\t\tBldg.\tRoom No."} /^CMSC[0-9][0-9]\$/ {course = \$1;} /^[0-9][0-9][0-9]\$/ {section = \$0;} /^[-A-Za-z]+([-A-Za-z]+)\$*/ {instr = \$0;} /^Seats \(Total: [0-9]+, Open: [0-9]+, Waitlist: [0-9]+\)\$/ {seats = \$3; open = \$6; waitlist = \$9;} /^[MWFTuh]+ [0-9]+:[0-9]+/ {days = \$1; time1 = \$2; time2 = \$3; time3 = \$4;} /^[A-Z]+ [0-9][0-9][0-9]\$/ {bldg = \$1; room = \$3; print course, "\t", section, "\t\t", instr, "\t\t", seats, "\t\t\t\t", open, "\t\t\t\t\t", waitlist, "\t\t\t\t\t\t", time1, "\t\t\t\t\t\t\t", time2, "\t\t\t\t\t\t\t", time3;}' | less

UNIX Tools Command: World Cup 1

cat worldcup.txt | sed 's/FIFA//g' | sed 's/[\{\}\\(\)]//g' | sed 's/fb//g' | sed 's/style=\"background:#fff68f\"//g' | sed 's/<\sup>//g' | sed 's/<\sup>//g' | sed 's/\sup>//g' | sed 's/\sup>//g' | sed 's/\sup>//g' | sed 's/style=white-space:nowrap//g' | awk -F'[, \[]' 'BEGIN \{place = 0;} /[A-Z][A-Z][A-Z]/ \{coun = \$1;} /[0-9] \[\[([0-9][0-9][0-9][0-9])*/ \{ if (place == 4) place = 1; else place = place + 1; if (length(\$4) != 0) print coun, \$4, place; if (length(\$11) != 0) print coun, \$11, place; if (length(\$18) != 0) print coun, \$18, place; if (length(\$25) != 0) print coun, \$25, place; if (length(\$32) != 0) print coun, \$32, place;\}' | less

Python Script: CMSC

See cmsc.py for source code

		Course No.	Section No.	Instructor	Seats	Open	Waitlist	Days	Time	Building	Room
0	0	CMSC100	0101	Charles Kassir	45	4	0	М	4:00pm - 4:50pm	CSI	2117
1	0	CMSC106	0101	Jianwu Wang	45	0	5	TuTh	9:30am - 10:45am	CSI	2117
	0	CMSC131	0101	Evan Golub	31	0	0	MWF	2:00pm - 2:50pm	CSI	1115
2	1	CMSC131	0102	Evan Golub	31	0	0	MWF	2:00pm - 2:50pm	CSI	1115
	2	CMSC131	0103	Evan Golub	31	1	0	MWF	2:00pm - 2:50pm	CSI	1115

Python Script: World Cup 1

		Country	Place	Year
	0	BRA	1	1958
	1	BRA	1	1962
0	2	BRA	1	1970
	3	BRA	1	1994
	4	BRA	1	2002

See worldcup.py for source code

Python Script: World Cup 2

See worldcup.py for source code (last few lines in the file are for World Cup 2)

Year	1930	1934	1938	1950	1954	1958	1962	1966	1970	1974	1978	1982	1986	1990	1994	1998	2002	2006	2010	2014
Country																				
ARG	2	NaN	1	NaN	1	2	NaN	NaN	NaN	NaN	NaN	2								
AUT	NaN	2	NaN	NaN	1	NaN														
BEL	NaN	1	NaN																	
BRA	NaN	NaN	3	2	NaN	1	1	NaN	1	4	3	NaN	NaN	NaN	1	2	1	NaN	NaN	4
BUL	NaN	1	NaN	NaN	NaN	NaN	NaN													
СНІ	NaN	NaN	NaN	NaN	NaN	NaN	1	NaN												
CRO	NaN	1	NaN	NaN	NaN	NaN														
ENG	NaN	1	NaN	NaN	NaN	NaN	NaN	2	NaN	NaN	NaN	NaN	NaN	NaN						