

Lab 3

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CPSC 5830

1. See S3 for notebook and parquet files.
 - a. Note: In my notebook, I included more airport information that was required. This helped me debug my code because I could not recognize airports solely based on the airport code. Instead, I created a schema for the airport type and left the other fields (airport name, city, etc).

2. Analysis:

- a. I found **22,692** flights that started on '2020-10-18'.
- b. The five flights that began the earliest on that day are shown in the table below:

Operator	DepartedAt	ArrivedAt	From.Code	To.Code
Southwest Airlines	2020-10-18 00:00:13.831	2020-10-18 01:51:28.892	BWI	MCO
RAINIER HELI INTERNATIONAL INC - KIRKLAND, WA	2020-10-18 00:00:14.136	2020-10-18 00:09:43.454	LAS	LAS
SMITH COLIN B - SAN DIEGO, CA	2020-10-18 00:00:14.58	2020-10-18 00:40:28.859	PSP	SAN
SkyWest Airlines	2020-10-18 00:00:15.782	2020-10-18 16:30:29.174	DEN	DEN
Sprockets Excel LLC	2020-10-18 00:00:29.049	2020-10-18 00:20:13.614	FTW	DAL

- c. The five flights that started on that day and ended at the latest time are shown in the table below:

Operator	DepartedAt	ArrivedAt	From.Code	To.Code
United Airlines	2020-10-18 10:36:15.707	2020-10-19 23:56:59.491	ORD	EWB
UNIVERSITY OF NORTH DAKOTA - GRAND FORKS, ND	2020-10-18 12:04:28.645	2020-10-19 23:55:28.224	VRB	VRB
ATLAS AIR INC - PURCHASE, NY	2020-10-18 21:44:43.47	2020-10-19 23:55:15.512	LAX	ANC
BRISCOE FLYERS LLC - DULUTH, GA	2020-10-18 21:50:15.19	2020-10-19 23:55:15.356	AND	CHA
Med Trans	2020-10-18 05:59:58.592	2020-10-19 23:55:13.843	FAT	MOD

- d. The five operators with the most flights and the number of flights from those operators are shown in the table below:

Operator	count
Southwest Airlines	1639
American Airlines	1480
Delta Air Lines	969
Private	944
United Airlines	707

- e. The five airports with the most departing flights on that day are shown in the table below:

+-----+-----+	
From[Code]	count
+-----+-----+	
PHX	1344
DFW	784
DEN	700
ORD	693
SLC	581
+-----+-----+	

- f. I found **438** flights out of SeaTac that day. The operators with the most flights out of SeaTac are shown in the table below:

+-----+-----+	
	Operator count
+-----+-----+	
Alaska Airlines	162
Horizon Air	60
Delta Air Lines	56
Delta Connection	44
Virgin America	16
+-----+-----+	
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