

Jordan Lawson

## 431 Python Project

DESCRIPTION OF ALGORITHMS	2
DEVELOPMENT ENVIRONMENT	4
RESULTS OF AUTOMATIC MODE (MODE 1)	5
RESULTS OF MODE 2	5
TEST OF MODE 1	12
TEST OF MODE 2	13

## DESCRIPTION OF ALGORITHMS

### Individual Flight Score

Most evaluation criteria the program provides for is based on individual flight scores. Every flight in the database is given a score so flights can be compared against each other, the higher the score the more likely the user is to have a successful flight. Score is determined by multiplying the number of seats on a flight by the success rate of the flight. The success rate of a flight is determined by the dividing the number of departures performed over the number of departures scheduled.

### Best Carrier

First a table is made with each unique carrier name in a column called "NAME". Next a column called "SCORE" is made which will hold the aggregate score for each carrier. Then the database is read and, for every flight, its score is added to the appropriate place in the score column for the carrier it had. This table is sorted for score and the top result with the highest score is the best carrier.

### Best Aircraft

First a table is made with each unique aircraft type in a column called "NAME". Next a column called "SCORE" is made which will hold the aggregate score for each aircraft. Then the database is read and, for every flight, its score is added to the appropriate place in the score column for the aircraft type number it had. This table is sorted for score and the top result with the highest score is the best aircraft.

### Best State

First a table is made with each unique state abbreviation in a column called "NAME". Next a column called "SCORE" is made which will hold the aggregate score for each destination state. Then the database is read and, for every flight, its score is added to the appropriate place in the score column for the state destination it had. This table is sorted for score and the top result with the highest score is the best state.

#### Best Destination

First a table is made with each unique destination city in a column called "NAME". Next a column called "SCORE" is made which will hold the aggregate score for each destination. Then the database is read and, for every flight, its score is added to the appropriate place in the score column for the destination it had. This table is sorted for score and the top result with the highest score is the best destination city.

#### Best Origin

First a table is made with each unique origin city in a column called "NAME". Next a column called "SCORE" is made which will hold the aggregate score for each origin city. Then the database is read and, for every flight, its score is added to the appropriate place in the score column for the origin city it had. This table is sorted for score and the top result with the highest score is the best origin city.

#### Best Month

First the best flights for each month is determined (flights with the best score) and stored in a table. Then each month is given a score by finding the mean of the best flight scores for the month and that is added to the table. The table is read and the highest month score determines the best month. Each month's name and average score is also displayed.

### Combination 1: Best Destination & Month

First the best month is determined using the algorithm for best month above. Then the best destination city is determined using the best destination algorithm above. These results are displayed onscreen along with flights that belong to the two categories.

### Combination 2: Best Carrier & Month

First the best month is determined using the algorithm for best month above. Then the best carrier is determined using the best destination algorithm above. These results are displayed onscreen along with flights that belong to the two categories.

### Combination 3: Best Aircraft & Month

First the best month is determined using the algorithm for best month above. Then the best aircraft is determined using the best destination algorithm above. These results are displayed onscreen along with flights that belong to the two categories.

## **DEVELOPMENT ENVIRONMENT**

OS: Windows 8.1

Python version: 3.6.4.final.0 32bits

GUI: Tkinter

Tkinter version: 8.6

Required external librarys: Pandas

Pandas version: 0.22.0

## RESULTS OF AUTOMATIC MODE (MODE 1)

Below are the results of automatic mode. Automatic mode displays the best aircraft type, carrier, destination city, and month to fly to the user. Each result is determined by the appropriate algorithm from the DESCRIPTION OF ALGORITHMS section.

BEST AIRCRAFT IS TYPE : 638

This aircraft type had the higher total score of all flight data.

BEST CARRIER IS TYPE : American Airlines Inc.

This carrier type had the higher total score of all flight data.

BEST DESTINATION IS TYPE : Charlotte, NC

This destination had the higher total score of all flight data.

BEST MONTH IS : July

Best Month average score : 5438.375321961423 is higher than every other month.

The flights with the best score are listed below.

	SCORE	SUCCESS_RATE	DISTANCE_RANGE	AIRCRAFT_TYPE	MONTH	UNIQUE_CARRIER_NAME
0	57035.609121	0.996743	500-999	699	11	American Airlines Inc. 57222
1	57035.609121	0.996743	500-999	699	11	American Airlines Inc. 57222
2	54619.480132	0.983444	500-999	699	1	American Airlines Inc. 55539
3	54235.685811	0.989865	500-999	699	6	American Airlines Inc. 54791
4	53871.687919	0.983221	500-999	699	1	American Airlines Inc. 54791
5	53866.108108	0.986486	500-999	699	6	American Airlines Inc. 54604

## RESULTS OF BEST AIRCRAFT

BEST AIRCRAFT IS TYPE : 0 638

This aircraft type had the higher total score of all flight data.

All aircraft type numbers and there scores are shown below.

	NAME	SCORE
0	638	6.256918e+06
1	699	6.135971e+06
2	698	3.592620e+06
3	629	2.618150e+06
4	655	2.221291e+06
5	694	1.914051e+06

## RESULTS OF BEST CARRIER

BEST CARRIER IS : 0 American Airlines Inc.

This carrier had the higher total score of all flight data.

All carriers and there scores are shown below.

	NAME	SCORE
0	American Airlines Inc.	1.307603e+07
1	PSA Airlines Inc.	7.182152e+06
2	Delta Air Lines Inc.	3.433461e+06
3	Southwest Airlines Co.	1.442914e+06
4	Piedmont Airlines	1.307447e+06
5	Republic Airlines	1.197330e+06

## RESULTS OF BEST MONTH

BEST MONTH IS : July

Best Month average score : 6383.91144490684 is higher than every other month.

January : 4832.467628747752

February : 4429.10755399997

March : 5453.916520713357

April : 5470.787452791895

May : 5572.926346229557

June : 6159.453268176186

July : 6383.91144490684

August : 5767.647846025704

September : 4854.268121175185

October : 6079.759318447531

November : 5532.805199237318

December : 4995.835095388776

Best month flights shown below.

	SCORE	SUCCESS_RATE	DISTANCE_RANGE	MONTH	UNIQUE_CARRIER_NAME	SEATS	DISTANCE
0	53311.787879	0.979798	500-999	7	American Airlines Inc. 54411	936	
1	52753.239865	0.976351	500-999	7	American Airlines Inc. 54031	936	
2	48840.320000	0.974545	1500-1999	7	American Airlines Inc. 50116	1773	
3	47897.119403	0.977612	400-499	7	American Airlines Inc. 48994	468	
4	45085.625498	0.980080	1500-1999	7	American Airlines Inc. 46002	1773	
5	41739.662447	0.970464	400-499	7	American Airlines Inc. 43010	468	

## RESULTS OF BEST DESTINATION CITY

BEST CITY TO FLY TO IS : 0 Charlotte, NC

This destination had the higher total score of all flight data.

All city destinations and there scores are shown below.

	NAME	SCORE
0	Charlotte, NC	1.265756e+07
1	Raleigh/Durham, NC	2.616525e+06
2	Atlanta, GA	1.774606e+06
3	New York, NY	1.674746e+06
4	Charleston, SC	1.102055e+06
5	Chicago, IL	7.795411e+05

## RESULTS OF BEST ORIGIN CITY

BEST CITY TO DEPART FROM IS : 0 Charlotte, NC

This origin city had the higher total score of all flight data.

All origin cites and there scores are shown below.

	NAME	SCORE
0	Charlotte, NC	1.086042e+07
1	Raleigh/Durham, NC	2.791630e+06
2	Atlanta, GA	1.947770e+06
3	New York, NY	1.663903e+06
4	Charleston, SC	1.187529e+06
5	Washington, DC	8.162673e+05



## RESULTS FOR DISTANCE

The flights below are sorted from shorted travel distance to longest.

	SCORE	SUCCESS_RATE	DISTANCE_RANGE	MONTH	UNIQUE_CARRIER_NAME	SEATS	DISTANCE
0	10412.546763	0.992806	0-99	10	PSA Airlines Inc.	10488	75
1	2877.065217	0.978261	0-99	4	PSA Airlines Inc.	2941	75
2	2877.065217	0.978261	0-99	4	PSA Airlines Inc.	2941	75
3	543.333333	0.833333	0-99	7	PSA Airlines Inc.	652	75
4	478.636364	0.818182	0-99	7	PSA Airlines Inc.	585	75
5	6995.166667	0.979167	0-99	8	PSA Airlines Inc.	7144	75

## RESULTS FOR BEST STATE

BEST STATE TO FLY TO IS : 0 NC

This state had the higher total score of all flight data.

All state destinations and there scores are shown below.

	NAME	SCORE
0	NC	1.661213e+07
1	SC	2.233011e+06
2	GA	1.978517e+06
3	NY	1.851848e+06
4	FL	1.471542e+06
5	VA	1.333234e+06

## RESULTS FOR BEST AIRCRAFT AND MONTH

BEST AIRCRAFT IS TYPE : 638

This aircraft type had the higher total score of all flight data.

BEST MONTH IS : July

Best Month average score : 6014.643646263518 is higher than every other month.

The flights for this aircraft during the best month are listed below.

	SCORE	SUCCESS_RATE	DISTANCE_RANGE	AIRCRAFT_TYPE	MONTH	UNIQUE_CARRIER_NAME	SEATS
0	17947.032258	0.975806	100-199	638	7	PSA Airlines Inc. 18392	
1	17799.016129	0.971774	100-199	638	7	PSA Airlines Inc. 18316	
2	17102.961039	0.987013	300-399	638	7	PSA Airlines Inc. 17328	
3	16804.225108	0.978355	300-399	638	7	PSA Airlines Inc. 17176	
4	16280.333333	0.969298	200-299	638	7	PSA Airlines Inc. 16796	
5	15975.656250	0.968750	300-399	638	7	PSA Airlines Inc. 16491	

## RESULTS FOR BEST CARRIER AND MONTH

BEST CARRIER IS TYPE : American Airlines Inc.

This carrier type had the higher total score of all flight data.

BEST MONTH IS : July

Best Month average score : 12837.370943467284 is higher than every other month.

The flights for this carrier during the best month are listed below.

	SCORE	SUCCESS_RATE	DISTANCE_RANGE	AIRCRAFT_TYPE	MONTH	UNIQUE_CARRIER_NAME	SEATS
0	53311.787879	0.979798	500-999	699	7	American Airlines Inc. 54411	
1	52753.239865	0.976351	500-999	699	7	American Airlines Inc. 54031	
2	48840.320000	0.974545	1500-1999	699	7	American Airlines Inc. 50116	
3	47897.119403	0.977612	400-499	699	7	American Airlines Inc. 48994	
4	45085.625498	0.980080	1500-1999	699	7	American Airlines Inc. 46002	
5	41739.662447	0.970464	400-499	699	7	American Airlines Inc. 43010	

## RESULTS FOR BEST DESTINATION AND MONTH

BEST DESTINATION IS TYPE : Charlotte, NC

This destination had the higher total score of all flight data.

BEST MONTH IS : July

Best Month average score : 7313.977991887215 is higher that every other month.

The flights to this city during the best month are listed below.

	SCORE	SUCCESS_RATE	DISTANCE_RANGE	DEST_CITY_NAME	MONTH	UNIQUE_CARRIER_NAME	SEATS
0	53311.787879	0.979798	500-999	Charlotte, NC	7	American Airlines Inc. 54411	
1	48840.320000	0.974545	1500-1999	Charlotte, NC	7	American Airlines Inc. 50116	
2	41739.662447	0.970464	400-499	Charlotte, NC	7	American Airlines Inc. 43010	
3	33477.087432	0.989071	1000-1499	Charlotte, NC	7	American Airlines Inc. 33847	
4	33310.867021	0.973404	2000-2499	Charlotte, NC	7	American Airlines Inc. 34221	
5	32916.155556	0.988889	2000-2499	Charlotte, NC	7	American Airlines Inc. 33286	

## TEST OF MODE 1

Best Flight Program

Choose an option using the drop down menu.

Automatic

BEST AIRCRAFT IS TYPE : 638  
This aircraft type had the higher total score of all flight data.  
BEST CARRIER IS TYPE : American Airlines Inc.  
This carrier type had the higher total score of all flight data.  
BEST DESTINATION IS TYPE : Charlotte, NC  
This destination had the higher total score of all flight data.  
BEST MONTH IS : July  
Best Month average score : 5438.375321961423 is higher that every other month.

The flights with the best score are listed below.

	SCORE	SUCCESS_RATE	DISTANCE_RANGE	AIRCRAFT_TYPE	MONTH	UNIQUE_CARRIER_NAME	SEATS
0	57035.609121	0.996743	500-999	699	11	American Airlines Inc.	57222
1	57035.609121	0.996743	500-999	699	11	American Airlines Inc.	57222
2	54619.480132	0.983444	500-999	699	1	American Airlines Inc.	55539
3	54235.685811	0.989865	500-999	699	6	American Airlines Inc.	54791
4	53871.687919	0.983221	500-999	699	1	American Airlines Inc.	54791
5	53866.108108	0.986486	500-999	699	6	American Airlines Inc.	54604
6	53311.787879	0.979798	500-999	699	7	American Airlines Inc.	54411
7	52753.239865	0.976351	500-999	699	7	American Airlines Inc.	54031
8	50659.335740	0.989170	500-999	699	8	American Airlines Inc.	51214
9	50496.097826	0.989130	500-999	699	4	American Airlines Inc.	51051
10	50309.120000	0.989091	500-999	699	4	American Airlines Inc.	50864
11	49935.516129	0.978495	500-999	699	8	American Airlines Inc.	51033
12	48994.708333	0.996212	400-499	699	10	American Airlines Inc.	49181
13	48840.320000	0.974545	1500-1999	699	7	American Airlines Inc.	50116
14	48620.713740	0.996183	400-499	699	6	American Airlines Inc.	48807
15	48435.844106	0.992395	400-499	699	8	American Airlines Inc.	48807
16	48433.716475	0.996169	1500-1999	699	12	American Airlines Inc.	48620
17	48059.722008	0.996139	400-499	699	10	American Airlines Inc.	48246
18	47897.119403	0.977612	400-499	699	7	American Airlines Inc.	48994

## TESTS OF MODE 2

Best Flight Program

BEST AIRCRAFT IS TYPE : 0 638  
This aircraft type had the higher total score of all flight data.  
All aircraft type numbers and there scores are shown below.

	NAME	SCORE
0	638	6.256918e+06
1	699	6.135971e+06
2	698	3.592620e+06
3	629	2.618150e+06
4	655	2.221291e+06
5	694	1.914051e+06
6	631	1.770284e+06
7	614	1.554214e+06
8	675	1.302957e+06
9	612	1.257768e+06
10	673	1.064134e+06
11	494	1.016145e+06
12	678	1.010681e+06
13	608	7.287019e+05
14	622	3.068742e+05
15	677	3.017628e+05
16	619	2.710294e+05
17	656	6.624108e+04
18	483	6.415792e+04
19	491	3.868698e+04
20	634	3.700188e+04
21	626	2.506847e+04
22	461	2.370169e+04
23	696	2.056770e+04
24	888	1.515402e+04
25	687	6.893929e+03

Choose an option using the drop down menu.

Aircraft

START

Best Flight Program

BEST CARRIER IS : 0 American Airlines Inc.  
This carrier had the higher total score of all flight data.  
All carriers and there scores are shown below.

	NAME	SCORE
0	American Airlines Inc.	1.307603e+07
1	PSA Airlines Inc.	7.182152e+06
2	Delta Air Lines Inc.	3.439461e+06
3	Southwest Airlines Co.	1.442914e+06
4	Piedmont Airlines	1.307447e+06
5	Republic Airlines	1.197330e+06
6	Endeavor Air Inc.	1.085270e+06
7	ExpressJet Airlines Inc.	9.562416e+05
8	JetBlue Airways	9.254151e+05
9	Air Wisconsin Airlines Corp	8.761536e+05
10	GoJet Airlines LLC d/b/a United Express	6.597113e+05
11	Envoy Air	3.765369e+05
12	Trans States Airlines	2.614152e+05
13	United Air Lines Inc.	2.450679e+05
14	SkyWest Airlines Inc.	2.187193e+05
15	Commutair Aka Champlain Enterprises, Inc.	1.765357e+05
16	Via Airlines d/b/a Charter Air Transport	1.179316e+05
17	Alaska Airlines Inc.	4.123897e+04
18	Mesa Airlines Inc.	3.845371e+04
19	Shuttle America Corp.	7.448026e+03
20	Kalitta Charters II	0.000000e+00
21	Compass Airlines	0.000000e+00

Choose an option using the drop down menu.

Carrier

START

Best Flight Program

BEST MONTH IS : July  
Best Month average score : 6383.91144490684 is higher that every other month.

January : 4832.467628747752  
February : 4429.10755399997  
March : 5453.916520713357  
April : 5470.787452791895  
May : 5572.926346229557  
June : 6159.453268176186  
July : 6383.91144490684  
August : 5767.647846025704  
September : 4854.268121175185  
October : 6079.759318447531  
November : 5532.805199237318  
December : 4995.835095388776

Choose an option using the drop down menu.

Best Month

START

Best month flights shown below.

	SCORE	SUCCESS RATE	DISTANCE RANGE	MONTH	UNIQUE_CARRIER_NAME	SEATS	DISTANCE
0	53311.787879	0.979798	500-999	7	American Airlines Inc.	54411	936
1	52753.239865	0.976351	500-999	7	American Airlines Inc.	54031	936
2	48840.320000	0.974545	1500-1999	7	American Airlines Inc.	50116	1773
3	47897.119403	0.977612	400-499	7	American Airlines Inc.	48994	468
4	45085.625498	0.980080	1500-1999	7	American Airlines Inc.	46002	1773
5	41739.662447	0.970464	400-499	7	American Airlines Inc.	43010	468
6	36655.392000	0.992000	300-399	7	Delta Air Lines Inc.	36951	356
7	36501.441767	0.991968	300-399	7	Delta Air Lines Inc.	36797	356
8	34222.010811	0.994595	1000-1499	7	American Airlines Inc.	34408	1337

Best Flight Program

BEST CITY TO FLY TO IS : 0 Charlotte, NC  
This destination had the higher total score of all flight data.  
All city destinations and there scores are shown below.

	NAME	SCORE
0	Charlotte, NC	1.265756e+07
1	Raleigh/Durham, NC	2.616525e+06
2	Atlanta, GA	1.774606e+06
3	New York, NY	1.674746e+06
4	Charleston, SC	1.102055e+06
5	Chicago, IL	7.795411e+05
6	Newark, NJ	7.727357e+05
7	Washington, DC	7.657190e+05
8	Philadelphia, PA	6.385289e+05
9	Boston, MA	5.983540e+05
10	Greensboro/High Point, NC	5.849088e+05
11	Greer, SC	5.723080e+05
12	Dallas/Fort Worth, TX	4.956060e+05
13	Baltimore, MD	4.499232e+05
14	Orlando, FL	3.704781e+05
15	Detroit, MI	3.212758e+05
16	Columbia, SC	2.949183e+05
17	Phoenix, AZ	2.762871e+05
18	Miami, FL	2.444391e+05
19	Wilmington, NC	2.343036e+05
20	San Francisco, CA	2.111591e+05
21	Asheville, NC	2.025350e+05
22	Houston, TX	1.959935e+05
23	Fort Lauderdale, FL	1.850970e+05
24	Los Angeles, CA	1.810916e+05
25	Tampa, FL	1.795623e+05

Choose an option using the drop down menu.

Destination

START

Best Flight Program

The flights below are sorted from shorted travel distance to longest.

	SCORE	SUCCESS_RATE	DISTANCE	RANGE	MONTH	UNIQUE_CARRIER_NAME	SEATS	DISTANCE
0	10412.546763	0.992806	0-99	10		FSA Airlines Inc.	10488	75
1	2877.065217	0.978261	0-99	4		FSA Airlines Inc.	2941	75
2	2877.065217	0.978261	0-99	4		FSA Airlines Inc.	2941	75
3	543.393333	0.833333	0-99	7		FSA Airlines Inc.	652	75
4	478.636364	0.818182	0-99	7		FSA Airlines Inc.	585	75
5	6995.166667	0.979167	0-99	8		FSA Airlines Inc.	7144	75
6	2530.731707	0.975610	0-99	8		FSA Airlines Inc.	2594	75
7	2530.731707	0.975610	0-99	8		FSA Airlines Inc.	2594	75
8	5853.658537	0.975610	0-99	6		FSA Airlines Inc.	6000	75
9	1106.823529	0.823529	0-99	9		Piedmont Airlines	1344	75
10	1187.294118	0.852941	0-99	9		Piedmont Airlines	1392	75
11	1505.882353	0.941176	0-99	4		FSA Airlines Inc.	1600	75
12	1601.470588	0.970588	0-99	4		FSA Airlines Inc.	1650	75
13	8057.781818	0.981818	0-99	1		FSA Airlines Inc.	8207	75
14	9576.593750	0.992188	0-99	12		FSA Airlines Inc.	9652	75
15	9576.593750	0.992188	0-99	12		FSA Airlines Inc.	9652	75
16	1451.612903	0.967742	0-99	3		Air Wisconsin Airlines Corp	1500	75
17	1451.612903	0.967742	0-99	3		Air Wisconsin Airlines Corp	1500	75
18	7910.218182	0.972727	0-99	1		FSA Airlines Inc.	8132	75
19	7068.800000	0.989474	0-99	4		FSA Airlines Inc.	7144	75
20	7068.800000	0.989474	0-99	4		FSA Airlines Inc.	7144	75
21	704.347826	0.782609	0-99	7		Piedmont Airlines	900	75
22	902.500000	0.950000	0-99	9		Piedmont Airlines	950	75
23	1306.666667	0.933333	0-99	4		Air Wisconsin Airlines Corp	1400	75
24	902.500000	0.950000	0-99	9		Piedmont Airlines	950	75
25	200.000000	0.833333	0-99	10		Piedmont Airlines	240	75
26	8906.960630	0.960630	0-99	9		FSA Airlines Inc.	9272	75
27	6250.393701	0.992126	0-99	7		FSA Airlines Inc.	6300	75

Choose an option using the drop down menu.

Distance

START

Best Flight Program

BEST CITY TO DEPART FROM IS : 0 Charlotte, NC  
This origin city had the higher total score of all flight data.  
All origin cities and there scores are shown below.

	NAME	SCORE
0	Charlotte, NC	1.086042e+07
1	Raleigh/Durham, NC	2.791630e+06
2	Atlanta, GA	1.947770e+06
3	New York, NY	1.663903e+06
4	Charleston, SC	1.187529e+06
5	Washington, DC	8.162673e+05
6	Chicago, IL	7.404328e+05
7	Newark, NJ	7.333742e+05
8	Greensboro/High Point, NC	6.425301e+05
9	Philadelphia, PA	6.053392e+05
10	Boston, MA	6.023933e+05
11	Greer, SC	5.812890e+05
12	Dallas/Fort Worth, TX	4.770948e+05
13	Baltimore, MD	4.609927e+05
14	Orlando, FL	3.623333e+05
15	Columbia, SC	3.379912e+05
16	Detroit, MI	3.306290e+05
17	Phoenix, AZ	2.799842e+05
18	Denver, CO	2.775951e+05
19	Wilmington, NC	2.675177e+05
20	San Francisco, CA	2.632525e+05
21	Miami, FL	2.605239e+05
22	Myrtle Beach, SC	2.202109e+05
23	Fort Lauderdale, FL	1.961811e+05
24	Asheville, NC	1.935299e+05
25	Minneapolis, MN	1.846348e+05

Choose an option using the drop down menu.

Origin

START

Best Flight Program

BEST STATE TO FLY TO IS : 0 NC  
This state had the higher total score of all flight data.  
All state destinations and there scores are shown below.

NAME	SCORE
0 NC	1.661213e+07
1 SC	2.233011e+06
2 GA	1.978517e+06
3 NY	1.851848e+06
4 FL	1.471542e+06
5 VA	1.333234e+06
6 PA	9.042872e+05
7 IL	7.965209e+05
8 NJ	7.727357e+05
9 TX	7.561666e+05
10 MA	5.983540e+05
11 MD	4.696427e+05
12 CA	4.457660e+05
13 TN	3.850144e+05
14 MI	3.525421e+05
15 OH	2.922123e+05
16 KY	2.797500e+05
17 AZ	2.762871e+05
18 AL	2.346618e+05
19 CO	1.688578e+05
20 MO	1.553044e+05
21 MN	1.387327e+05
22 WV	1.322385e+05
23 NV	1.292203e+05
24 IN	1.103285e+05
25 RI	1.067690e+05

Choose an option using the drop down menu.

State

START

Best Flight Program

BEST AIRCRAFT IS TYPE : 638  
This aircraft type had the higher total score of all flight data.  
BEST MONTH IS : July  
Best Month average score : 6014.643646263518 is higher than every other month.

The flights for this aircraft during the best month are listed below.

SCORE	SUCCESS RATE	DISTANCE RANGE	AIRCRAFT TYPE	MONTH	UNIQUE_CARRIER NAME	SEATS
0	17947.032258	0.975806	100-199	638	7	PSA Airlines Inc. 18392
1	17799.016129	0.971774	100-199	638	7	PSA Airlines Inc. 18316
2	17102.961039	0.987013	300-399	638	7	PSA Airlines Inc. 17328
3	16804.225108	0.978355	300-399	638	7	PSA Airlines Inc. 17176
4	16280.333333	0.969298	200-299	638	7	PSA Airlines Inc. 16796
5	15975.656250	0.968750	300-399	638	7	PSA Airlines Inc. 16491
6	15904.653333	0.964444	200-299	638	7	PSA Airlines Inc. 15960
7	15809.433962	0.990566	100-199	638	7	PSA Airlines Inc. 15960
8	15758.400000	0.960000	300-399	638	7	PSA Airlines Inc. 16415
9	15583.241706	0.985782	100-199	638	7	PSA Airlines Inc. 15808
10	14377.611940	0.970149	100-199	638	7	PSA Airlines Inc. 14820
11	14297.595960	0.974747	100-199	638	7	PSA Airlines Inc. 14668
12	10242.019231	0.929487	400-499	638	7	Endeavor Air Inc. 11019
13	9986.875000	0.906250	400-499	638	7	Endeavor Air Inc. 11020
14	9210.503817	0.961832	200-299	638	7	PSA Airlines Inc. 9576
15	9129.500000	0.968750	200-299	638	7	PSA Airlines Inc. 9424
16	8970.491803	0.983607	400-499	638	7	PSA Airlines Inc. 9120
17	8818.533333	0.983333	400-499	638	7	PSA Airlines Inc. 8968
18	8666.576271	0.983051	400-499	638	7	PSA Airlines Inc. 8816
19	8593.747899	0.974790	400-499	638	7	PSA Airlines Inc. 8816
20	8441.846194	0.974359	400-499	638	7	PSA Airlines Inc. 8664
21	8365.896552	0.974138	400-499	638	7	PSA Airlines Inc. 8588
22	8364.922414	0.974138	500-999	638	7	PSA Airlines Inc. 8587

Choose an option using the drop down menu.

Best Aircraft & Month

START

Best Flight Program

BEST CARRIER IS TYPE : American Airlines Inc.  
This carrier type had the higher total score of all flight data.  
BEST MONTH IS : July  
Best Month average score : 12837.370943467284 is higher than every other month.

The flights for this carrier during the best month are listed below.

SCORE	SUCCESS RATE	DISTANCE RANGE	AIRCRAFT TYPE	MONTH	UNIQUE_CARRIER NAME	SEATS
0	53311.787879	0.979798	500-999	699	7	American Airlines Inc. 54411
1	52753.239865	0.976351	500-999	699	7	American Airlines Inc. 54031
2	48840.320000	0.974545	1500-1999	699	7	American Airlines Inc. 50116
3	47897.119403	0.977612	400-499	699	7	American Airlines Inc. 48994
4	45085.625498	0.980080	1500-1999	699	7	American Airlines Inc. 46002
5	41739.662447	0.970464	400-499	699	7	American Airlines Inc. 43010
6	34222.010811	0.994595	1000-1499	699	7	American Airlines Inc. 34408
7	33669.048387	0.983871	2000-2499	699	7	American Airlines Inc. 34221
8	33477.087432	0.989071	1000-1499	699	7	American Airlines Inc. 33847
9	33310.867021	0.973404	2000-2499	699	7	American Airlines Inc. 34221
10	32916.155556	0.988889	2000-2499	699	7	American Airlines Inc. 33286
11	32729.178771	0.988827	2000-2499	699	7	American Airlines Inc. 33099
12	31799.562500	0.982955	500-999	699	7	American Airlines Inc. 32351
13	31619.903955	0.977401	500-999	699	7	American Airlines Inc. 32351
14	31535.089474	0.942105	500-999	699	7	American Airlines Inc. 33473
15	31343.068783	0.941799	500-999	699	7	American Airlines Inc. 33280
16	25807.335714	0.992857	500-999	699	7	American Airlines Inc. 25993
17	23831.272727	0.969697	300-399	698	7	American Airlines Inc. 24576
18	23191.875648	0.968912	300-399	698	7	American Airlines Inc. 23936
19	22530.844444	0.988889	500-999	698	7	American Airlines Inc. 22784
20	22289.240310	0.961240	1500-1999	699	7	American Airlines Inc. 23188
21	22276.559055	0.968504	400-499	699	7	American Airlines Inc. 23001
22	21716.129032	0.967742	2000-2499	699	7	American Airlines Inc. 22440

Choose an option using the drop down menu.

Best Carrier & Month

START

Best Flight Program									
BEST DESTINATION IS TYPE : Charlotte, NC									
This destination had the higher total score of all flight data.									
BEST MONTH IS : July									
Best Month average score : 7313.977991887215 is higher than every other month.									
The flights to this city during the best month are listed below.									
	SCORE	SUCCESS_RATE	DISTANCE_RANGE	DEST_CITY_NAME	MONTH	UNIQUE_CARRIER_NAME	SEATS		
0	53311.787879	0.979798	500-999	Charlotte, NC	7	American Airlines Inc.	54411		
1	48840.320000	0.974545	1500-1999	Charlotte, NC	7	American Airlines Inc.	50116		
2	41739.662447	0.970464	400-499	Charlotte, NC	7	American Airlines Inc.	43010		
3	33477.087432	0.989071	1000-1499	Charlotte, NC	7	American Airlines Inc.	33847		
4	33310.867021	0.973404	2000-2499	Charlotte, NC	7	American Airlines Inc.	34221		
5	32916.155556	0.988889	2000-2499	Charlotte, NC	7	American Airlines Inc.	33286		
6	31799.562500	0.982955	500-999	Charlotte, NC	7	American Airlines Inc.	32351		
7	31343.068783	0.941799	500-999	Charlotte, NC	7	American Airlines Inc.	33280		
8	23831.272727	0.969697	300-399	Charlotte, NC	7	American Airlines Inc.	24576		
9	22276.559055	0.968504	400-499	Charlotte, NC	7	American Airlines Inc.	23001		
10	21638.582857	0.982857	500-999	Charlotte, NC	7	American Airlines Inc.	22016		
11	21542.400000	0.960000	1500-1999	Charlotte, NC	7	American Airlines Inc.	22440		
12	21137.393162	0.982906	500-999	Charlotte, NC	7	American Airlines Inc.	21505		
13	21010.041958	0.993007	200-299	Charlotte, NC	7	Delta Air Lines Inc.	21158		
14	20795.636364	0.958678	2000-2499	Charlotte, NC	7	American Airlines Inc.	21692		
15	19072.847682	0.993377	300-399	Charlotte, NC	7	American Airlines Inc.	19200		
16	18891.612903	0.975806	500-999	Charlotte, NC	7	American Airlines Inc.	19360		
17	17851.239669	0.991736	500-999	Charlotte, NC	7	American Airlines Inc.	18000		
18	17799.016129	0.971774	100-199	Charlotte, NC	7	PSA Airlines Inc.	18316		
19	17281.454545	0.990909	500-999	Charlotte, NC	7	American Airlines Inc.	17440		
20	14804.225108	0.978355	300-399	Charlotte, NC	7	PSA Airlines Inc.	17176		
21	15975.656250	0.968750	300-399	Charlotte, NC	7	PSA Airlines Inc.	16491		
22	15913.494505	0.967033	2000-2499	Charlotte, NC	7	American Airlines Inc.	16456		

Best Flight Program									
Choose an option using the drop down menu.									
	SCORE	SUCCESS_RATE	MONTH	UNIQUE_CARRIER_NAME	SEATS	DEPARTURES_SCHEDULED	DEPARTURES_PERFORMED		
0	53311.787879	0.979798	7	American Airlines Inc.	54411	297	291		
1	52753.239865	0.976351	7	American Airlines Inc.	54031	296	289		
2	48840.320000	0.974545	7	American Airlines Inc.	50116	275	268		
3	47897.119403	0.977612	7	American Airlines Inc.	48994	268	262		
4	45085.625498	0.980080	7	American Airlines Inc.	46002	251	246		
5	41739.662447	0.970464	7	American Airlines Inc.	43010	237	230		
6	36655.392000	0.992000	7	Delta Air Lines Inc.	36951	250	248		
7	36501.441767	0.991968	7	Delta Air Lines Inc.	36797	249	247		
8	34222.010811	0.994595	7	American Airlines Inc.	34408	185	184		
9	33669.048387	0.983871	7	American Airlines Inc.	34221	186	183		
10	33477.087432	0.989071	7	American Airlines Inc.	33847	183	181		
11	33310.867021	0.973404	7	American Airlines Inc.	34221	188	183		
12	32916.155556	0.988889	7	American Airlines Inc.	33286	180	178		
13	32729.178771	0.988827	7	American Airlines Inc.	33099	179	177		
14	31799.562500	0.982955	7	American Airlines Inc.	32351	176	173		
15	31619.903955	0.977401	7	American Airlines Inc.	32351	177	173		
16	31535.089474	0.942105	7	American Airlines Inc.	33473	190	179		
17	31343.068783	0.941799	7	American Airlines Inc.	33280	189	178		
18	25807.335714	0.992857	7	American Airlines Inc.	25993	140	139		
19	23831.272727	0.969697	7	American Airlines Inc.	24576	198	192		
20	23191.875648	0.968912	7	American Airlines Inc.	23936	193	187		
21	22530.844444	0.988889	7	American Airlines Inc.	22784	180	178		
22	22289.240310	0.961240	7	American Airlines Inc.	23188	129	124		
23	22276.559055	0.968504	7	American Airlines Inc.	23001	127	123		
24	21716.129032	0.967742	7	American Airlines Inc.	22440	124	120		
25	21638.582857	0.982857	7	American Airlines Inc.	22016	175	172		
26	21542.400000	0.960000	7	American Airlines Inc.	22440	125	120		
27	21137.393162	0.982906	7	American Airlines Inc.	21505	117	115		
28	21010.041958	0.993007	7	Delta Air Lines Inc.	21158	143	142		