Problem 1

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library('ggplot2')  
library('XML')  
air=read.csv("~/Desktop/ABIA.csv")  
summary(air)

## Year Month DayofMonth DayOfWeek   
## Min. :2008 Min. : 1.00 Min. : 1.00 Min. :1.000   
## 1st Qu.:2008 1st Qu.: 3.00 1st Qu.: 8.00 1st Qu.:2.000   
## Median :2008 Median : 6.00 Median :16.00 Median :4.000   
## Mean :2008 Mean : 6.29 Mean :15.73 Mean :3.902   
## 3rd Qu.:2008 3rd Qu.: 9.00 3rd Qu.:23.00 3rd Qu.:6.000   
## Max. :2008 Max. :12.00 Max. :31.00 Max. :7.000   
##   
## DepTime CRSDepTime ArrTime CRSArrTime   
## Min. : 1 Min. : 55 Min. : 1 Min. : 5   
## 1st Qu.: 917 1st Qu.: 915 1st Qu.:1107 1st Qu.:1115   
## Median :1329 Median :1320 Median :1531 Median :1535   
## Mean :1329 Mean :1320 Mean :1487 Mean :1505   
## 3rd Qu.:1728 3rd Qu.:1720 3rd Qu.:1903 3rd Qu.:1902   
## Max. :2400 Max. :2346 Max. :2400 Max. :2400   
## NA's :1413 NA's :1567   
## UniqueCarrier FlightNum TailNum ActualElapsedTime  
## WN :34876 Min. : 1 : 1104 Min. : 22.0   
## AA :19995 1st Qu.: 640 N678CA : 195 1st Qu.: 57.0   
## CO : 9230 Median :1465 N511SW : 180 Median :125.0   
## YV : 4994 Mean :1917 N526SW : 176 Mean :120.2   
## B6 : 4798 3rd Qu.:2653 N528SW : 172 3rd Qu.:164.0   
## XE : 4618 Max. :9741 N520SW : 168 Max. :506.0   
## (Other):20749 (Other):97265 NA's :1601   
## CRSElapsedTime AirTime ArrDelay DepDelay   
## Min. : 17.0 Min. : 3.00 Min. :-129.000 Min. :-42.000   
## 1st Qu.: 58.0 1st Qu.: 38.00 1st Qu.: -9.000 1st Qu.: -4.000   
## Median :130.0 Median :105.00 Median : -2.000 Median : 0.000   
## Mean :122.1 Mean : 99.81 Mean : 7.065 Mean : 9.171   
## 3rd Qu.:165.0 3rd Qu.:142.00 3rd Qu.: 10.000 3rd Qu.: 8.000   
## Max. :320.0 Max. :402.00 Max. : 948.000 Max. :875.000   
## NA's :11 NA's :1601 NA's :1601 NA's :1413   
## Origin Dest Distance TaxiIn   
## AUS :49623 AUS :49637 Min. : 66 Min. : 0.000   
## DAL : 5583 DAL : 5573 1st Qu.: 190 1st Qu.: 4.000   
## DFW : 5508 DFW : 5506 Median : 775 Median : 5.000   
## IAH : 3704 IAH : 3691 Mean : 705 Mean : 6.413   
## PHX : 2786 PHX : 2783 3rd Qu.:1085 3rd Qu.: 7.000   
## DEN : 2719 DEN : 2673 Max. :1770 Max. :143.000   
## (Other):29337 (Other):29397 NA's :1567   
## TaxiOut Cancelled CancellationCode Diverted   
## Min. : 1.00 Min. :0.00000 :97840 Min. :0.000000   
## 1st Qu.: 9.00 1st Qu.:0.00000 A: 719 1st Qu.:0.000000   
## Median : 12.00 Median :0.00000 B: 605 Median :0.000000   
## Mean : 13.96 Mean :0.01431 C: 96 Mean :0.001824   
## 3rd Qu.: 16.00 3rd Qu.:0.00000 3rd Qu.:0.000000   
## Max. :305.00 Max. :1.00000 Max. :1.000000   
## NA's :1419   
## CarrierDelay WeatherDelay NASDelay SecurityDelay   
## Min. : 0.00 Min. : 0.00 Min. : 0.00 Min. : 0.00   
## 1st Qu.: 0.00 1st Qu.: 0.00 1st Qu.: 0.00 1st Qu.: 0.00   
## Median : 0.00 Median : 0.00 Median : 2.00 Median : 0.00   
## Mean : 15.39 Mean : 2.24 Mean : 12.47 Mean : 0.07   
## 3rd Qu.: 16.00 3rd Qu.: 0.00 3rd Qu.: 16.00 3rd Qu.: 0.00   
## Max. :875.00 Max. :412.00 Max. :367.00 Max. :199.00   
## NA's :79513 NA's :79513 NA's :79513 NA's :79513   
## LateAircraftDelay  
## Min. : 0.00   
## 1st Qu.: 0.00   
## Median : 6.00   
## Mean : 22.97   
## 3rd Qu.: 30.00   
## Max. :458.00   
## NA's :79513

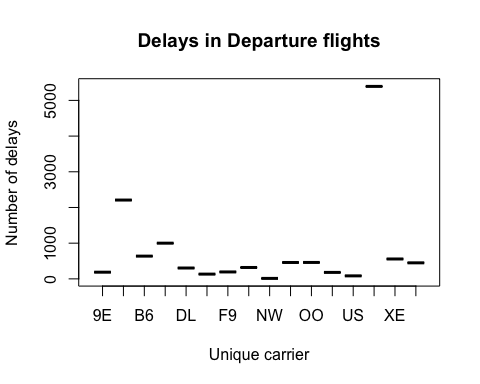
names(air)

## [1] "Year" "Month" "DayofMonth"   
## [4] "DayOfWeek" "DepTime" "CRSDepTime"   
## [7] "ArrTime" "CRSArrTime" "UniqueCarrier"   
## [10] "FlightNum" "TailNum" "ActualElapsedTime"  
## [13] "CRSElapsedTime" "AirTime" "ArrDelay"   
## [16] "DepDelay" "Origin" "Dest"   
## [19] "Distance" "TaxiIn" "TaxiOut"   
## [22] "Cancelled" "CancellationCode" "Diverted"   
## [25] "CarrierDelay" "WeatherDelay" "NASDelay"   
## [28] "SecurityDelay" "LateAircraftDelay"

attach(air)  
  
Departureflights=subset(air,Origin=='AUS')  
head(Departureflights,50)

## Year Month DayofMonth DayOfWeek DepTime CRSDepTime ArrTime CRSArrTime  
## 2 2008 1 1 2 555 600 826 835  
## 3 2008 1 1 2 600 600 728 729  
## 4 2008 1 1 2 601 605 727 750  
## 5 2008 1 1 2 601 600 654 700  
## 6 2008 1 1 2 636 645 934 932  
## 7 2008 1 1 2 646 655 735 750  
## 10 2008 1 1 2 654 700 1117 1133  
## 11 2008 1 1 2 712 705 805 805  
## 12 2008 1 1 2 715 715 826 832  
## 13 2008 1 1 2 722 726 819 825  
## 14 2008 1 1 2 725 730 844 901  
## 15 2008 1 1 2 735 740 1007 1010  
## 16 2008 1 1 2 736 740 838 840  
## 17 2008 1 1 2 737 745 924 943  
## 18 2008 1 1 2 745 755 859 905  
## 21 2008 1 1 2 755 700 854 821  
## 22 2008 1 1 2 755 800 1018 1010  
## 23 2008 1 1 2 809 815 859 912  
## 25 2008 1 1 2 819 825 943 947  
## 29 2008 1 1 2 825 830 1128 1136  
## 32 2008 1 1 2 834 835 936 935  
## 33 2008 1 1 2 837 840 1008 1014  
## 36 2008 1 1 2 850 850 957 1010  
## 38 2008 1 1 2 857 900 946 1000  
## 40 2008 1 1 2 903 900 952 1000  
## 41 2008 1 1 2 907 915 1003 1013  
## 44 2008 1 1 2 921 920 1019 1030  
## 45 2008 1 1 2 922 925 1016 1032  
## 48 2008 1 1 2 926 925 1307 1325  
## 52 2008 1 1 2 957 1000 1053 1057  
## 53 2008 1 1 2 1001 955 1124 1130  
## 56 2008 1 1 2 1006 1005 1236 1235  
## 57 2008 1 1 2 1007 945 1109 1045  
## 59 2008 1 1 2 1023 1030 1219 1221  
## 60 2008 1 1 2 1024 1025 1330 1344  
## 62 2008 1 1 2 1035 1035 1336 1343  
## 63 2008 1 1 2 1045 1050 1137 1145  
## 64 2008 1 1 2 1045 1050 1149 1155  
## 65 2008 1 1 2 1054 1055 1136 1140  
## 69 2008 1 1 2 1105 1115 1226 1229  
## 71 2008 1 1 2 1107 1110 1219 1230  
## 72 2008 1 1 2 1118 1125 1206 1220  
## 73 2008 1 1 2 1120 1120 1208 1220  
## 74 2008 1 1 2 1129 1130 1321 1320  
## 76 2008 1 1 2 1130 1115 1703 1553  
## 79 2008 1 1 2 1136 1140 1413 1415  
## 80 2008 1 1 2 1147 1150 1535 1535  
## 81 2008 1 1 2 1155 1200 1327 1344  
## 82 2008 1 1 2 1200 1200 1308 1325  
## 83 2008 1 1 2 1206 1152 1555 1559  
## UniqueCarrier FlightNum TailNum ActualElapsedTime CRSElapsedTime  
## 2 AA 1614 N438AA 151 155  
## 3 YV 2883 N922FJ 148 149  
## 4 9E 5743 89189E 86 105  
## 5 AA 1157 N4XAAA 53 60  
## 6 NW 1674 N967N 178 167  
## 7 CO 340 N14604 49 55  
## 10 B6 1060 N238JB 203 213  
## 11 AA 652 N432AA 53 60  
## 12 XE 519 N11194 71 77  
## 13 CO 1573 N69351 57 59  
## 14 XE 303 N13553 139 151  
## 15 WN 3098 N750SA 152 150  
## 16 AA 1958 N526AA 62 60  
## 17 UA 657 N817UA 227 238  
## 18 AA 1465 N4XPAA 194 190  
## 21 XE 1 N12166 179 201  
## 22 OO 4009 N368CA 203 190  
## 23 CO 440 N17229 50 57  
## 25 UA 1190 N374UA 144 142  
## 29 OH 5124 N692CA 123 126  
## 32 AA 450 N406AA 62 60  
## 33 US 435 N158AW 151 154  
## 36 AA 379 N455AA 187 200  
## 38 AA 1743 N3CFAA 49 60  
## 40 WN 2677 N496WN 169 180  
## 41 CO 640 N79402 56 58  
## 44 WN 2949 N611SW 178 190  
## 45 XE 311 N18557 114 127  
## 48 WN 3489 N462WN 161 180  
## 52 CO 1572 N59338 56 57  
## 53 WN 513 N505SW 143 155  
## 56 AA 368 N4WTAA 150 150  
## 57 AA 511 N404AA 62 60  
## 59 XE 532 N11544 116 111  
## 60 EV 4324 N707EV 126 139  
## 62 EV 4338 N977EV 121 128  
## 63 WN 61 N609SW 52 55  
## 64 AA 2024 N474AA 64 65  
## 65 WN 2577 N738CB 42 45  
## 69 F9 215 N805FR 141 134  
## 71 AA 813 N526AA 192 200  
## 72 MQ 3488 N658AE 48 55  
## 73 WN 1838 N247WN 168 180  
## 74 OO 2931 N507CA 112 110  
## 76 OH 5202 N679CA 273 218  
## 79 AA 2486 N491AA 157 155  
## 80 XE 2366 N27152 168 165  
## 81 NW 1727 N605NW 92 104  
## 82 WN 2985 N795SW 188 205  
## 83 YV 7276 N509MJ 169 187  
## AirTime ArrDelay DepDelay Origin Dest Distance TaxiIn TaxiOut Cancelled  
## 2 133 -9 -5 AUS ORD 978 7 11 0  
## 3 125 -1 0 AUS PHX 872 7 16 0  
## 4 70 -23 -4 AUS MEM 559 4 12 0  
## 5 38 -6 1 AUS DFW 190 5 10 0  
## 6 145 2 -9 AUS MSP 1042 11 22 0  
## 7 28 -15 -9 AUS IAH 140 6 15 0  
## 10 177 -16 -6 AUS JFK 1522 13 13 0  
## 11 36 0 7 AUS DFW 190 6 11 0  
## 12 56 -6 0 AUS MSY 445 5 10 0  
## 13 28 -6 -4 AUS IAH 140 13 16 0  
## 14 121 -17 -5 AUS TUS 797 4 14 0  
## 15 123 -3 -5 AUS MDW 972 15 14 0  
## 16 38 -2 -4 AUS DFW 190 13 11 0  
## 17 203 -19 -8 AUS SFO 1504 3 21 0  
## 18 179 -6 -10 AUS SNA 1209 4 11 0  
## 21 163 33 55 AUS ONT 1197 4 12 0  
## 22 171 8 -5 AUS SLC 1085 18 14 0  
## 23 31 -13 -6 AUS IAH 140 5 14 0  
## 25 129 -4 -6 AUS DEN 775 5 10 0  
## 29 93 -8 -5 AUS ATL 813 8 22 0  
## 32 35 1 -1 AUS DFW 190 13 14 0  
## 33 130 -6 -3 AUS PHX 872 9 12 0  
## 36 173 -13 0 AUS LAX 1242 4 10 0  
## 38 35 -14 -3 AUS DFW 190 5 9 0  
## 40 151 -8 3 AUS LAS 1090 7 11 0  
## 41 30 -10 -8 AUS IAH 140 9 17 0  
## 44 163 -11 1 AUS SAN 1164 3 12 0  
## 45 100 -16 -3 AUS ABQ 619 4 10 0  
## 48 141 -18 1 AUS BWI 1342 10 10 0  
## 52 32 -4 -3 AUS IAH 140 10 14 0  
## 53 126 -6 6 AUS PHX 872 8 9 0  
## 56 131 1 1 AUS ORD 978 8 11 0  
## 57 34 24 22 AUS DFW 190 15 13 0  
## 59 101 -2 -7 AUS MCI 650 3 12 0  
## 60 112 -14 -1 AUS CVG 958 5 9 0  
## 62 95 -7 0 AUS ATL 813 9 17 0  
## 63 39 -8 -5 AUS DAL 189 2 11 0  
## 64 38 -6 -5 AUS DFW 190 10 16 0  
## 65 32 -4 -1 AUS HOU 148 2 8 0  
## 69 126 -3 -10 AUS DEN 775 5 10 0  
## 71 170 -11 -3 AUS LAX 1242 12 10 0  
## 72 37 -14 -7 AUS DAL 189 2 9 0  
## 73 154 -12 0 AUS LAS 1090 5 9 0  
## 74 94 1 -1 AUS MCI 650 5 13 0  
## 76 209 70 15 AUS JFK 1522 48 16 0  
## 79 136 -2 -4 AUS ORD 978 4 17 0  
## 80 151 0 -3 AUS CLE 1174 6 11 0  
## 81 74 -17 -5 AUS MEM 559 5 13 0  
## 82 170 -17 0 AUS LAX 1242 8 10 0  
## 83 148 -4 14 AUS IAD 1297 7 14 0  
## CancellationCode Diverted CarrierDelay WeatherDelay NASDelay  
## 2 0 NA NA NA  
## 3 0 NA NA NA  
## 4 0 NA NA NA  
## 5 0 NA NA NA  
## 6 0 NA NA NA  
## 7 0 NA NA NA  
## 10 0 NA NA NA  
## 11 0 NA NA NA  
## 12 0 NA NA NA  
## 13 0 NA NA NA  
## 14 0 NA NA NA  
## 15 0 NA NA NA  
## 16 0 NA NA NA  
## 17 0 NA NA NA  
## 18 0 NA NA NA  
## 21 0 33 0 0  
## 22 0 NA NA NA  
## 23 0 NA NA NA  
## 25 0 NA NA NA  
## 29 0 NA NA NA  
## 32 0 NA NA NA  
## 33 0 NA NA NA  
## 36 0 NA NA NA  
## 38 0 NA NA NA  
## 40 0 NA NA NA  
## 41 0 NA NA NA  
## 44 0 NA NA NA  
## 45 0 NA NA NA  
## 48 0 NA NA NA  
## 52 0 NA NA NA  
## 53 0 NA NA NA  
## 56 0 NA NA NA  
## 57 0 0 0 2  
## 59 0 NA NA NA  
## 60 0 NA NA NA  
## 62 0 NA NA NA  
## 63 0 NA NA NA  
## 64 0 NA NA NA  
## 65 0 NA NA NA  
## 69 0 NA NA NA  
## 71 0 NA NA NA  
## 72 0 NA NA NA  
## 73 0 NA NA NA  
## 74 0 NA NA NA  
## 76 0 15 0 55  
## 79 0 NA NA NA  
## 80 0 NA NA NA  
## 81 0 NA NA NA  
## 82 0 NA NA NA  
## 83 0 NA NA NA  
## SecurityDelay LateAircraftDelay  
## 2 NA NA  
## 3 NA NA  
## 4 NA NA  
## 5 NA NA  
## 6 NA NA  
## 7 NA NA  
## 10 NA NA  
## 11 NA NA  
## 12 NA NA  
## 13 NA NA  
## 14 NA NA  
## 15 NA NA  
## 16 NA NA  
## 17 NA NA  
## 18 NA NA  
## 21 0 0  
## 22 NA NA  
## 23 NA NA  
## 25 NA NA  
## 29 NA NA  
## 32 NA NA  
## 33 NA NA  
## 36 NA NA  
## 38 NA NA  
## 40 NA NA  
## 41 NA NA  
## 44 NA NA  
## 45 NA NA  
## 48 NA NA  
## 52 NA NA  
## 53 NA NA  
## 56 NA NA  
## 57 0 22  
## 59 NA NA  
## 60 NA NA  
## 62 NA NA  
## 63 NA NA  
## 64 NA NA  
## 65 NA NA  
## 69 NA NA  
## 71 NA NA  
## 72 NA NA  
## 73 NA NA  
## 74 NA NA  
## 76 0 0  
## 79 NA NA  
## 80 NA NA  
## 81 NA NA  
## 82 NA NA  
## 83 NA NA

Depflightdelay=subset(Departureflights,DepDelay>4)  
departflightdelay=aggregate(Depflightdelay$DepDelay,list(Depflightdelay$UniqueCarrier),length)  
plot(departflightdelay,main='Delays in Departure flights',xlab='Unique carrier',ylab='Number of delays')

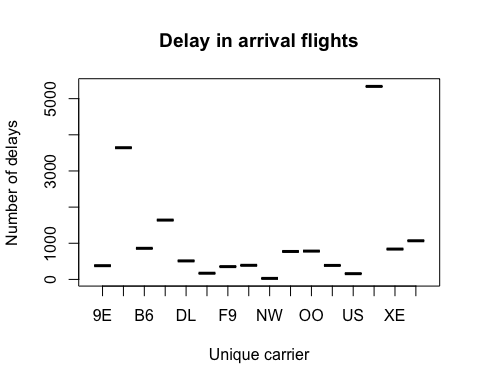


Creating a subset of arrival flights

Arrivalflights=subset(air,Dest=='AUS')  
head(Arrivalflights,50)

## Year Month DayofMonth DayOfWeek DepTime CRSDepTime ArrTime CRSArrTime  
## 1 2008 1 1 2 120 1935 309 2130  
## 8 2008 1 1 2 650 700 841 857  
## 9 2008 1 1 2 650 650 1139 1145  
## 19 2008 1 1 2 748 755 1007 1020  
## 20 2008 1 1 2 753 755 1137 1125  
## 24 2008 1 1 2 811 815 1048 1100  
## 26 2008 1 1 2 819 820 944 1003  
## 27 2008 1 1 2 822 810 1255 1250  
## 28 2008 1 1 2 823 825 916 920  
## 30 2008 1 1 2 827 830 958 1009  
## 31 2008 1 1 2 832 800 929 900  
## 34 2008 1 1 2 840 842 1138 1118  
## 35 2008 1 1 2 846 850 1317 1330  
## 37 2008 1 1 2 851 855 1119 1109  
## 39 2008 1 1 2 858 905 1053 1100  
## 42 2008 1 1 2 909 915 1205 1210  
## 43 2008 1 1 2 912 850 1305 1235  
## 46 2008 1 1 2 923 923 1111 1119  
## 47 2008 1 1 2 923 925 1014 1025  
## 49 2008 1 1 2 926 850 1402 1332  
## 50 2008 1 1 2 941 945 1042 1050  
## 51 2008 1 1 2 942 945 1116 1130  
## 54 2008 1 1 2 1001 1010 1045 1100  
## 55 2008 1 1 2 1001 1004 1058 1101  
## 58 2008 1 1 2 1016 1015 1501 1505  
## 61 2008 1 1 2 1028 1030 1344 1352  
## 66 2008 1 1 2 1055 1105 1329 1349  
## 67 2008 1 1 2 1058 1100 1155 1157  
## 68 2008 1 1 2 1059 1040 1150 1140  
## 70 2008 1 1 2 1105 1105 1406 1420  
## 75 2008 1 1 2 1129 1130 1226 1230  
## 77 2008 1 1 2 1133 1120 1356 1345  
## 78 2008 1 1 2 1135 1135 1221 1225  
## 84 2008 1 1 2 1206 1136 1739 1701  
## 86 2008 1 1 2 1209 1210 1356 1410  
## 90 2008 1 1 2 1226 1215 1739 1735  
## 92 2008 1 1 2 1235 1235 1348 1335  
## 95 2008 1 1 2 1241 1230 1512 1515  
## 97 2008 1 1 2 1243 1240 1716 1720  
## 98 2008 1 1 2 1244 1245 1329 1340  
## 101 2008 1 1 2 1302 1300 1436 1438  
## 102 2008 1 1 2 1308 1316 1614 1638  
## 103 2008 1 1 2 1309 1305 1800 1805  
## 104 2008 1 1 2 1316 1300 1504 1500  
## 106 2008 1 1 2 1320 1310 1526 1508  
## 107 2008 1 1 2 1334 1335 1700 1649  
## 109 2008 1 1 2 1340 1342 1715 1725  
## 111 2008 1 1 2 1347 1330 1433 1415  
## 112 2008 1 1 2 1350 1345 1637 1645  
## 114 2008 1 1 2 1355 1346 1451 1439  
## UniqueCarrier FlightNum TailNum ActualElapsedTime CRSElapsedTime  
## 1 9E 5746 84129E 109 115  
## 8 XE 541 N18557 111 117  
## 9 AA 1182 N4WAAA 169 175  
## 19 WN 61 N609SW 79 85  
## 20 B6 1061 N179JB 284 270  
## 24 AA 1199 N491AA 157 165  
## 26 XE 511 N11544 85 103  
## 27 WN 297 N723SW 153 160  
## 28 CO 1583 N59338 53 55  
## 30 EV 4677 N977EV 151 159  
## 31 AA 1109 N404AA 57 60  
## 34 YV 7273 N509MJ 238 216  
## 35 WN 3222 N639SW 151 160  
## 37 XE 2252 N27152 208 194  
## 39 OO 2930 N507CA 115 115  
## 42 WN 3481 N704SW 236 235  
## 43 B6 1263 N273JB 293 285  
## 46 NW 1728 N605NW 108 116  
## 47 AA 421 N526AA 51 60  
## 49 XE 2 N12166 156 162  
## 50 WN 1021 N247WN 61 65  
## 51 WN 2985 N795SW 154 165  
## 54 MQ 3355 N658AE 44 50  
## 55 CO 441 N19621 57 57  
## 58 WN 304 N638SW 165 170  
## 61 US 225 N155AW 136 142  
## 66 XE 531 N18557 94 104  
## 67 CO 741 N14653 57 57  
## 68 AA 1477 N533AA 51 60  
## 70 WN 1105 N614SW 121 135  
## 75 AA 1717 N484AA 57 60  
## 77 WN 3152 N301SW 83 85  
## 78 WN 501 N527SW 46 50  
## 84 UA 374 N834UA 213 205  
## 86 XE 308 N11194 167 180  
## 90 AA 1024 N530AA 193 200  
## 92 AA 668 N552AA 73 60  
## 95 AA 1545 N580AA 151 165  
## 97 WN 155 N394SW 153 160  
## 98 MQ 3412 N649PP 45 55  
## 101 OO 1991 N806SK 154 158  
## 102 US 227 N311AW 126 142  
## 103 AA 1308 N565AA 171 180  
## 104 WN 1885 N688SW 168 180  
## 106 OH 5339 N709CA 186 178  
## 107 B6 1065 N265JB 266 254  
## 109 OO 4052 N668CA 155 163  
## 111 WN 2124 N364SW 46 45  
## 112 WN 1856 N483WN 107 120  
## 114 CO 241 N59630 56 53  
## AirTime ArrDelay DepDelay Origin Dest Distance TaxiIn TaxiOut  
## 1 88 339 345 MEM AUS 559 3 18  
## 8 94 -16 -10 MCI AUS 650 6 11  
## 9 153 -6 0 LAX AUS 1242 4 12  
## 19 68 -13 -7 ELP AUS 528 3 8  
## 20 257 12 -2 JFK AUS 1522 4 23  
## 24 139 -12 -4 ORD AUS 978 4 14  
## 26 74 -19 -1 MSY AUS 445 4 7  
## 27 139 5 12 SAN AUS 1164 4 10  
## 28 28 -4 -2 IAH AUS 140 5 20  
## 30 131 -11 -3 ATL AUS 813 3 17  
## 31 36 29 32 DFW AUS 190 4 17  
## 34 218 20 -2 IAD AUS 1297 4 16  
## 35 136 -13 -4 LAS AUS 1090 4 11  
## 37 185 10 -4 CLE AUS 1174 5 18  
## 39 92 -7 -7 MCI AUS 650 6 17  
## 42 224 -5 -6 BWI AUS 1342 5 7  
## 43 268 30 22 BOS AUS 1698 3 22  
## 46 93 -8 0 MEM AUS 559 3 12  
## 47 37 -11 -2 DFW AUS 190 2 12  
## 49 144 30 36 ONT AUS 1197 5 7  
## 50 48 -8 -4 LBB AUS 341 5 8  
## 51 141 -14 -3 TPA AUS 928 3 10  
## 54 34 -15 -9 DAL AUS 189 3 7  
## 55 27 -3 -3 IAH AUS 140 6 24  
## 58 153 -4 1 LAX AUS 1242 4 8  
## 61 108 -8 -2 PHX AUS 872 4 24  
## 66 82 -20 -10 ABQ AUS 619 5 7  
## 67 28 -2 -2 IAH AUS 140 5 24  
## 68 33 10 19 DFW AUS 190 3 15  
## 70 107 -14 0 PHX AUS 872 3 11  
## 75 35 -4 -1 DFW AUS 190 4 18  
## 77 71 11 13 ELP AUS 528 5 7  
## 78 35 -4 0 DAL AUS 189 4 7  
## 84 185 38 30 SFO AUS 1504 5 23  
## 86 149 -14 -1 JAX AUS 954 4 14  
## 90 180 4 11 SJC AUS 1476 3 10  
## 92 36 13 0 DFW AUS 190 4 33  
## 95 136 -3 11 ORD AUS 978 3 12  
## 97 133 -4 3 LAS AUS 1090 5 15  
## 98 33 -11 -1 DAL AUS 189 3 9  
## 101 134 -2 2 ATL AUS 813 5 15  
## 102 108 -24 -8 PHX AUS 872 4 14  
## 103 151 -5 4 LAX AUS 1242 7 13  
## 104 151 4 16 MCO AUS 993 3 14  
## 106 155 18 10 CVG AUS 958 7 24  
## 107 246 11 -1 JFK AUS 1522 3 17  
## 109 128 -10 -2 SLC AUS 1085 5 22  
## 111 28 18 17 HOU AUS 148 4 14  
## 112 92 -8 5 DEN AUS 775 4 11  
## 114 29 12 9 IAH AUS 140 6 21  
## Cancelled CancellationCode Diverted CarrierDelay WeatherDelay NASDelay  
## 1 0 0 339 0 0  
## 8 0 0 NA NA NA  
## 9 0 0 NA NA NA  
## 19 0 0 NA NA NA  
## 20 0 0 NA NA NA  
## 24 0 0 NA NA NA  
## 26 0 0 NA NA NA  
## 27 0 0 NA NA NA  
## 28 0 0 NA NA NA  
## 30 0 0 NA NA NA  
## 31 0 0 29 0 0  
## 34 0 0 0 0 20  
## 35 0 0 NA NA NA  
## 37 0 0 NA NA NA  
## 39 0 0 NA NA NA  
## 42 0 0 NA NA NA  
## 43 0 0 10 0 8  
## 46 0 0 NA NA NA  
## 47 0 0 NA NA NA  
## 49 0 0 10 0 0  
## 50 0 0 NA NA NA  
## 51 0 0 NA NA NA  
## 54 0 0 NA NA NA  
## 55 0 0 NA NA NA  
## 58 0 0 NA NA NA  
## 61 0 0 NA NA NA  
## 66 0 0 NA NA NA  
## 67 0 0 NA NA NA  
## 68 0 0 NA NA NA  
## 70 0 0 NA NA NA  
## 75 0 0 NA NA NA  
## 77 0 0 NA NA NA  
## 78 0 0 NA NA NA  
## 84 0 0 21 0 8  
## 86 0 0 NA NA NA  
## 90 0 0 NA NA NA  
## 92 0 0 NA NA NA  
## 95 0 0 NA NA NA  
## 97 0 0 NA NA NA  
## 98 0 0 NA NA NA  
## 101 0 0 NA NA NA  
## 102 0 0 NA NA NA  
## 103 0 0 NA NA NA  
## 104 0 0 NA NA NA  
## 106 0 0 10 0 8  
## 107 0 0 NA NA NA  
## 109 0 0 NA NA NA  
## 111 0 0 4 0 1  
## 112 0 0 NA NA NA  
## 114 0 0 NA NA NA  
## SecurityDelay LateAircraftDelay  
## 1 0 0  
## 8 NA NA  
## 9 NA NA  
## 19 NA NA  
## 20 NA NA  
## 24 NA NA  
## 26 NA NA  
## 27 NA NA  
## 28 NA NA  
## 30 NA NA  
## 31 0 0  
## 34 0 0  
## 35 NA NA  
## 37 NA NA  
## 39 NA NA  
## 42 NA NA  
## 43 0 12  
## 46 NA NA  
## 47 NA NA  
## 49 0 20  
## 50 NA NA  
## 51 NA NA  
## 54 NA NA  
## 55 NA NA  
## 58 NA NA  
## 61 NA NA  
## 66 NA NA  
## 67 NA NA  
## 68 NA NA  
## 70 NA NA  
## 75 NA NA  
## 77 NA NA  
## 78 NA NA  
## 84 0 9  
## 86 NA NA  
## 90 NA NA  
## 92 NA NA  
## 95 NA NA  
## 97 NA NA  
## 98 NA NA  
## 101 NA NA  
## 102 NA NA  
## 103 NA NA  
## 104 NA NA  
## 106 0 0  
## 107 NA NA  
## 109 NA NA  
## 111 0 13  
## 112 NA NA  
## 114 NA NA

Arrflightdelay=subset(Arrivalflights,ArrDelay>4)  
Arrflightdelay=aggregate(Arrflightdelay$ArrDelay,list(Arrflightdelay$UniqueCarrier),length)  
plot(Arrflightdelay,main='Delay in arrival flights',xlab='Unique carrier',ylab='Number of delays')



From the above two plots we can infer which airlines has the most number of delays and which airlines has the least number of delays, which can help us choose an airline we favor for travel.