a) Which vendors have the most trips, and what is the total revenue generated by that vendor?
   OUTPUT: Vendor: 2: VeriFone Inc generate maximum revenue.

b) Which pickup location generates the most revenue?
   OUTPUT: Location ID 132 generates Maximum revenue.

c) What are the different payment types used by customers and their count? The results should be in a sorted format.
   OUTPUT Below Payment types describe by number id 1= Credit card 2= Cash 3= No charge 4= Dispute 5= Unknown 6= Voided trip

d) What is the average trip time for different pickup locations?

```
"109"    203.1381
"9"       74.273
"3"       60.4143
"122"     57.586
"10"      56.1188
"205"     53.4171
"215"     47.3433
"132"     44.5347
"219"     43.529
"102"     42.8231
"254"     41.8002
"130"     38.6366
"138"     37.4428
"93"      36.9668
"222"     35.8303
"176"     35.3633
"5"       35.0625
"29"      34.4977
"259"     33.5907
"73"      33.49
"154"     33.0083
"185"     31.4982
"2"       31.0548
"22"      29.7523
"194"     29.2254
"38"      28.8971
"192"     28.3852
"28"      27.8063
"216"     27.3997
"56"      27.2604
"12"      27.1717
"72"      26.0934
"218"     25.6406
"70"      25.4183
"184"     25.3967
```

e) Calculate the average tips to revenue ratio of the drivers for different pickup locations in sorted format.

```
"1"      0.12280054026828338
"10"     0.10341985109036379
"100"    0.09971499320153916
"101"    0.11378933573647326
"102"    0.08878480145766839
"105"    0.07602373196835738
"106"    0.1134541990792185
"107"    0.11925476770336918
"108"    0.07039173659248449
"109"    0.1896889668334451
"11"     0.058032672461070585
"111"    0.09203346671516915
"112"    0.10885457268865018
"113"    0.11742847360831894
"114"    0.11561549040891052
"115"    0.1024656785738679
"116"    0.0910018572044488
"117"    0.032745177372568116
"118"    0.07963696564772661
"119"    0.068277950196844
"12"     0.08578104516898145
"120"    0.09501251403035434
"121"    0.08957204957768224
"122"    0.09233346348098795
"123"    0.1502962277706154
"124"    0.091235983344314
"125"    0.12256637319450063
"126"    0.05412332768918744
"127"    0.08566028373967267
"128"    0.10274191959006697
"129"    0.06460783060368541
"13"     0.11711242201646355
"130"    0.10321533501152916
"131"    0.08016029304432844
"132"    0.10121684761779591
"133"    0.09049842954763858
"134"    0.09818866107004519
"135"    0.08395162006407768
"136"    0.035218971158968104
"137"    0.11266843961431423
"138"    0.1307794695370675
"139"    0.06507302547620175
"14"     0.09610265720277181
"140"    0.11143832821117793
"141"    0.11172599481825417
"142"    0.1125390342085203
```

f) How does revenue vary over time? Calculate the average trip revenue per month - analysing it by hour of the day (day vs night) and the day of the week (weekday vs weekend).

```
[3, "D", 6, 5]   19.677382655728223
[3, "D", 6, 6]   20.116308211178346
[3, "D", 7, 0]   14.8068903925165
[3, "D", 7, 1]   14.135772450457887
[3, "D", 7, 2]   14.499646568853017
[3, "D", 7, 3]   14.606266366748153
[3, "D", 7, 4]   14.532465861387703
[3, "D", 7, 5]   16.146780367468107
[3, "D", 7, 6]   17.884824131089324
[3, "D", 8, 0]   15.082638943192709
[3, "D", 8, 1]   14.36155575358702
[3, "D", 8, 2]   14.907604712334534
[3, "D", 8, 3]   15.118939288941126
[3, "D", 8, 4]   15.066199441551346
[3, "D", 8, 5]   13.945318140974235
[3, "D", 8, 6]   15.442457006755673
[3, "D", 9, 0]   15.407340852285504
[3, "D", 9, 1]   14.753088266997892
[3, "D", 9, 2]   15.382085430660746
[3, "D", 9, 3]   15.736632612012666
[3, "D", 9, 4]   15.7315044278208
[3, "D", 9, 5]   13.149422371699014
[3, "D", 9, 6]   14.123488949133877
[3, "N", 0, 0]   20.40521359874317
[3, "N", 0, 1]   17.276197995863022
[3, "N", 0, 2]   17.601844621054536
[3, "N", 0, 3]   17.25439005270323
[3, "N", 0, 4]   17.319914947221616
[3, "N", 0, 5]   16.53061715387093
[3, "N", 0, 6]   15.555541933661654
[3, "N", 1, 0]   19.68703647305948
[3, "N", 1, 1]   16.41271198977643
[3, "N", 1, 2]   16.925512278579316
[3, "N", 1, 3]   16.61165540540129
[3, "N", 1, 4]   16.160107419186303
[3, "N", 1, 5]   15.832497441155462
[3, "N", 1, 6]   15.364370270396241
[3, "N", 19, 0]  15.741789679794332
[3, "N", 19, 1]  15.277445970111039
[3, "N", 19, 2]  16.20599355997634
[3, "N", 19, 3]  16.54377192830582
[3, "N", 19, 4]  15.94514029882594
[3, "N", 19, 5]  14.164873520747108
[3, "N", 19, 6]  15.69852857863186
[3, "N", 2, 0]   18.22057571817039
[3, "N", 2, 1]   16.031631874536583
[3, "N", 2, 2]   17.007477382017846
[3, "N", 2, 3]   15.890491018705909
[3, "N", 2, 4]   15.659892363689025
[3, "N", 2, 5]   15.399850275361139
```