Analysis Summary:

Taking a look at the fitbit data has led to some interesting points of data. The first being that on average users spend much more time sedentary with lightly active following suit. The interesting part is that very active minutes are higher than fairly active. This is something that we will take a look into next when reviewing the daily average minutes spent. On average users spend about 991.21 minutes (16 hours) sedentary, 192.81 (3.21 hours) lightly active, 13.56 minutes (.22 hours) daily active, and finally 21.16 minutes (.35 hours) very active.

Now if we break this down by week we are able to see a little more information on where most of the minutes are being used. Here we see that the average amount of time is being broken down by each day of the week. Furthermore we add a new column avg calories burned which can help us indicate the most active day. We see based on the data below that Mondays are the most sedentary day with 990.25 minutes. The most light active day would be Saturday, with the most daily active day being Saturday as well. One thing we do notice though is that on Monday is on average the most active day for very active minutes. The last thing we take a look into is on average the most calories are burned on Tuesday which is not the most active day excluding sedentary minutes. This will need further investigation.

Row	dayofweek	avg_total_steps	avg_total_distance	avg_very_active_minutes	avg_fairly_active_min...	avg_lightly_active_m...	avg_sedentary_minu...	avg_calories	total_active_time
1	Sun	6933.2314049586766	5.0271900736934665	19.983471074380162	14.528925619834709	173.97520661157031	990.25619834710722	2263.0000000000009	208.48760330578517
2	Mon	7780.8666666666686	5.552916660221916	23.108333333333334	14.000000000000002	192.05833333333337	1027.9416666666664	2324.2083333333339	229.16666666666669
3	Tue	8125.00657894737	5.832236808050717	22.953947368421048	14.335526315789471	197.34210526315798	1007.361842105263	2356.0131578947371	234.6315789473685
4	Wed	7559.3733333333348	5.488333327832323	20.780000000000005	13.100000000000005	189.85333333333321	989.48000000000013	2302.62	223.73333333333323
5	Thu	7405.8367346938785	5.3122449235065634	19.408163265306122	11.959183673469388	185.42176870748298	961.99319727891157	2199.5714285714275	216.78911564625849
6	Fri	7448.2301587301581	5.3099206213262811	20.055555555555568	12.11111111111107	204.19841269841265	1000.3095238095235	2331.7857142857147	236.36507936507934
7	Sat	8152.9758064516118	5.8546774227082015	21.919354838709676	15.201612903225806	207.14516129032262	964.28225806451644	2354.9677419354839	244.26612903225811

The last amount of information regarding activity time is the percentage that users spend active vs sedentary. We find that on average a user spends about 18.67 percent of time being active with 81.32 percent being sedentary. To break this even further down as we discussed prior on average the most sedentary day is Sunday with the most Active day being Saturday.

Now let's take a look at users' sleep schedule as well, on average we see that users are asleep the longest on Sundays, sleeping for about 7.5 hours. We also see that Sundays are the most time users are in bed with about 8.39 hours. This means that users spend about an hour in bed not sleeping. Taking a look back at our previous data we see that Sunday is also the highest day for sedentary activity so this is a point we can take a deeper look into.

We see that users spend the most time awake in bed on Sunday and Saturdays. One thing that we can take a look into when building our visualization is to see how active users get sleep.