

Case Study: Bellabeat

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Bellabeat Case Study

Business task:

Identify smart device usage trends in Fitbit and apply those trends to one of the products in Bellabeat to help influence Bellabeat marketing strategy. It will help stakeholders to decide what other features to add or concentrate in the device to enhance the customer experience.

About the FitBit data

1. The data is stored in Kaggle
2. The data is organized in long format.
3. The dataset used was generated by respondents to a distributed survey via Amazon Mechanical Turk between 03.12.2016-05.12.2016 from thirty respondents and was provided through Mobius.
4. The license is CC0: Public Domain which means it is available for public to copy, edit and modify.
5. The data has been collected only by a small group of 30 people and we don't have information about their demographics. This could mean we might have a sampling bias due to unknown group of participants
6. This dataset has various factors like activities, heartrate, sleep cycle data for every minute which might help to see the trends and connection between those variables that can be used to implement in Bellabeat product.
7. The data has been collected only for a short time frame (2 months) which could be a problem to track activity of the same group in other seasons in order to get an overall picture.

Step 1: Download the data

Download the data from <https://www.kaggle.com/datasets/arashnic/fitbit>

It has 29 files.

Step 2: Install the packages

I uploaded the data in R studio. To clean and manipulate the data, the following packages were installed:

```
install.packages("tidyverse")

## Installing package into '/cloud/lib/x86_64-pc-linux-gnu-library/4.4'
## (as 'lib' is unspecified)

library("tidyverse")

## -- Attaching core tidyverse packages ----- tidyverse 2.0.0 --
## v dplyr     1.1.4     v readr     2.1.5
## vforcats   1.0.0     v stringr   1.5.1
```

```

## v ggplot2     3.5.1      v tibble      3.2.1
## v lubridate   1.9.4      v tidyverse   1.3.1
## v purrr       1.0.2

## -- Conflicts ----- tidyverse_conflicts() --
## x dplyr::filter() masks stats::filter()
## x dplyr::lag()   masks stats::lag()
## i Use the conflicted package (<http://conflicted.r-lib.org/>) to force all conflicts to become errors
install.packages("readr")

## Installing package into '/cloud/lib/x86_64-pc-linux-gnu-library/4.4'
## (as 'lib' is unspecified)
library("readr")
install.packages("skimr")

## Installing package into '/cloud/lib/x86_64-pc-linux-gnu-library/4.4'
## (as 'lib' is unspecified)
library("skimr")
install.packages("janitor")

## Installing package into '/cloud/lib/x86_64-pc-linux-gnu-library/4.4'
## (as 'lib' is unspecified)
library("janitor")

##
## Attaching package: 'janitor'
##
## The following objects are masked from 'package:stats':
##
##     chisq.test, fisher.test
install.packages("here")

## Installing package into '/cloud/lib/x86_64-pc-linux-gnu-library/4.4'
## (as 'lib' is unspecified)
library("here")

## here() starts at /cloud/project
install.packages("ggplot2")

## Installing package into '/cloud/lib/x86_64-pc-linux-gnu-library/4.4'
## (as 'lib' is unspecified)
library("ggplot2")

```

Step 3: Read the datasets that we are going to analyze

```

activity <- read.csv("/cloud/project/mturkfitbit_export_4.12.16-5.12.16/Fitabase Data 4.12.16-5.12.16/daily/activity.csv")
calories <- read.csv("/cloud/project/mturkfitbit_export_4.12.16-5.12.16/Fitabase Data 4.12.16-5.12.16/daily/calories.csv")
intensities <- read.csv("/cloud/project/mturkfitbit_export_4.12.16-5.12.16/Fitabase Data 4.12.16-5.12.16/daily/intensities.csv")
steps <- read.csv("/cloud/project/mturkfitbit_export_4.12.16-5.12.16/Fitabase Data 4.12.16-5.12.16/daily/steps.csv")
sleep <- read.csv("/cloud/project/mturkfitbit_export_4.12.16-5.12.16/Fitabase Data 4.12.16-5.12.16/sleep.csv")
weightlog <- read.csv("/cloud/project/mturkfitbit_export_4.12.16-5.12.16/Fitabase Data 4.12.16-5.12.16/weightlog.csv")

```

Step 4: View the head of the dataset to make sure we have read the correct dataset

```
head(activity)
```

```
##           Id ActivityDate TotalSteps TotalDistance TrackerDistance
## 1 1503960366 4/12/2016      13162       8.50        8.50
## 2 1503960366 4/13/2016      10735       6.97        6.97
## 3 1503960366 4/14/2016      10460       6.74        6.74
## 4 1503960366 4/15/2016      9762        6.28        6.28
## 5 1503960366 4/16/2016     12669       8.16        8.16
## 6 1503960366 4/17/2016      9705       6.48        6.48
##   LoggedActivitiesDistance VeryActiveDistance ModeratelyActiveDistance
## 1                      0            1.88          0.55
## 2                      0            1.57          0.69
## 3                      0            2.44          0.40
## 4                      0            2.14          1.26
## 5                      0            2.71          0.41
## 6                      0            3.19          0.78
##   LightActiveDistance SedentaryActiveDistance VeryActiveMinutes
## 1          6.06                  0            25
## 2          4.71                  0            21
## 3          3.91                  0            30
## 4          2.83                  0            29
## 5          5.04                  0            36
## 6          2.51                  0            38
##   FairlyActiveMinutes LightlyActiveMinutes SedentaryMinutes Calories
## 1             13                  328         728    1985
## 2             19                  217         776    1797
## 3             11                  181        1218    1776
## 4             34                  209         726    1745
## 5             10                  221         773    1863
## 6             20                  164         539    1728
```

```
head(calories)
```

```
##           Id ActivityDay Calories
## 1 1503960366 4/12/2016    1985
## 2 1503960366 4/13/2016    1797
## 3 1503960366 4/14/2016    1776
## 4 1503960366 4/15/2016    1745
## 5 1503960366 4/16/2016    1863
## 6 1503960366 4/17/2016    1728
```

```
head(intensities)
```

```
##           Id ActivityDay SedentaryMinutes LightlyActiveMinutes
## 1 1503960366 4/12/2016        728          328
## 2 1503960366 4/13/2016        776          217
## 3 1503960366 4/14/2016       1218          181
## 4 1503960366 4/15/2016        726          209
## 5 1503960366 4/16/2016        773          221
## 6 1503960366 4/17/2016        539          164
##   FairlyActiveMinutes VeryActiveMinutes SedentaryActiveDistance
## 1             13              25                  0
## 2             19              21                  0
## 3             11              30                  0
```

```

## 4          34          29          0
## 5          10          36          0
## 6          20          38          0
##   LightActiveDistance ModeratelyActiveDistance VeryActiveDistance
## 1           6.06           0.55         1.88
## 2           4.71           0.69         1.57
## 3           3.91           0.40         2.44
## 4           2.83           1.26         2.14
## 5           5.04           0.41         2.71
## 6           2.51           0.78         3.19

head(steps)

##           Id ActivityDay StepTotal
## 1 1503960366  4/12/2016     13162
## 2 1503960366  4/13/2016     10735
## 3 1503960366  4/14/2016     10460
## 4 1503960366  4/15/2016      9762
## 5 1503960366  4/16/2016    12669
## 6 1503960366  4/17/2016      9705

head(sleep)

##           Id       SleepDay TotalSleepRecords TotalMinutesAsleep
## 1 1503960366 4/12/2016 12:00:00 AM             1              327
## 2 1503960366 4/13/2016 12:00:00 AM             2              384
## 3 1503960366 4/15/2016 12:00:00 AM             1              412
## 4 1503960366 4/16/2016 12:00:00 AM             2              340
## 5 1503960366 4/17/2016 12:00:00 AM             1              700
## 6 1503960366 4/19/2016 12:00:00 AM             1              304
##   TotalTimeInBed
## 1            346
## 2            407
## 3            442
## 4            367
## 5            712
## 6            320

head(weightlog)

##           Id        Date WeightKg WeightPounds Fat    BMI
## 1 1503960366 5/2/2016 11:59:59 PM     52.6    115.9631 22 22.65
## 2 1503960366 5/3/2016 11:59:59 PM     52.6    115.9631 NA 22.65
## 3 1927972279 4/13/2016 1:08:52 AM    133.5    294.3171 NA 47.54
## 4 2873212765 4/21/2016 11:59:59 PM     56.7    125.0021 NA 21.45
## 5 2873212765 5/12/2016 11:59:59 PM     57.3    126.3249 NA 21.69
## 6 4319703577 4/17/2016 11:59:59 PM     72.4    159.6147 25 27.45
##   IsManualReport      LogId
## 1      True 1.462234e+12
## 2      True 1.462320e+12
## 3     False 1.460510e+12
## 4      True 1.461283e+12
## 5      True 1.463098e+12
## 6      True 1.460938e+12

```

Clean the activity dataset

```
clean_names(activity)
```

```
##           id activity_date total_steps total_distance tracker_distance
## 1  1503960366    4/12/2016      13162          8.50          8.50
## 2  1503960366    4/13/2016      10735          6.97          6.97
## 3  1503960366    4/14/2016      10460          6.74          6.74
## 4  1503960366    4/15/2016      9762           6.28          6.28
## 5  1503960366    4/16/2016     12669          8.16          8.16
## 6  1503960366    4/17/2016      9705          6.48          6.48
## 7  1503960366    4/18/2016     13019          8.59          8.59
## 8  1503960366    4/19/2016     15506          9.88          9.88
## 9  1503960366    4/20/2016     10544          6.68          6.68
## 10 1503960366    4/21/2016      9819           6.34          6.34
## 11 1503960366    4/22/2016     12764          8.13          8.13
## 12 1503960366    4/23/2016     14371          9.04          9.04
## 13 1503960366    4/24/2016     10039          6.41          6.41
## 14 1503960366    4/25/2016     15355          9.80          9.80
## 15 1503960366    4/26/2016     13755          8.79          8.79
## 16 1503960366    4/27/2016     18134         12.21         12.21
## 17 1503960366    4/28/2016     13154          8.53          8.53
## 18 1503960366    4/29/2016     11181          7.15          7.15
## 19 1503960366    4/30/2016     14673          9.25          9.25
## 20 1503960366    5/1/2016      10602          6.81          6.81
## 21 1503960366    5/2/2016      14727          9.71          9.71
## 22 1503960366    5/3/2016      15103          9.66          9.66
## 23 1503960366    5/4/2016      11100          7.15          7.15
## 24 1503960366    5/5/2016      14070          8.90          8.90
## 25 1503960366    5/6/2016      12159          8.03          8.03
## 26 1503960366    5/7/2016      11992          7.71          7.71
## 27 1503960366    5/8/2016      10060          6.58          6.58
## 28 1503960366    5/9/2016      12022          7.72          7.72
## 29 1503960366    5/10/2016     12207          7.77          7.77
## 30 1503960366   5/11/2016     12770          8.13          8.13
## 31 1503960366   5/12/2016        0          0.00          0.00
## 32 1624580081   4/12/2016      8163          5.31          5.31
## 33 1624580081   4/13/2016      7007          4.55          4.55
## 34 1624580081   4/14/2016      9107          5.92          5.92
## 35 1624580081   4/15/2016      1510          0.98          0.98
## 36 1624580081   4/16/2016      5370          3.49          3.49
## 37 1624580081   4/17/2016      6175          4.06          4.06
## 38 1624580081   4/18/2016     10536          7.41          7.41
## 39 1624580081   4/19/2016      2916          1.90          1.90
## 40 1624580081   4/20/2016      4974          3.23          3.23
## 41 1624580081   4/21/2016      6349          4.13          4.13
## 42 1624580081   4/22/2016      4026          2.62          2.62
## 43 1624580081   4/23/2016      8538          5.55          5.55
## 44 1624580081   4/24/2016      6076          3.95          3.95
## 45 1624580081   4/25/2016      6497          4.22          4.22
## 46 1624580081   4/26/2016      2826          1.84          1.84
## 47 1624580081   4/27/2016      8367          5.44          5.44
## 48 1624580081   4/28/2016      2759          1.79          1.79
## 49 1624580081   4/29/2016      2390          1.55          1.55
```

## 50	1624580081	4/30/2016	6474	4.30	4.30
## 51	1624580081	5/1/2016	36019	28.03	28.03
## 52	1624580081	5/2/2016	7155	4.93	4.93
## 53	1624580081	5/3/2016	2100	1.37	1.37
## 54	1624580081	5/4/2016	2193	1.43	1.43
## 55	1624580081	5/5/2016	2470	1.61	1.61
## 56	1624580081	5/6/2016	1727	1.12	1.12
## 57	1624580081	5/7/2016	2104	1.37	1.37
## 58	1624580081	5/8/2016	3427	2.23	2.23
## 59	1624580081	5/9/2016	1732	1.13	1.13
## 60	1624580081	5/10/2016	2969	1.93	1.93
## 61	1624580081	5/11/2016	3134	2.04	2.04
## 62	1624580081	5/12/2016	2971	1.93	1.93
## 63	1644430081	4/12/2016	10694	7.77	7.77
## 64	1644430081	4/13/2016	8001	5.82	5.82
## 65	1644430081	4/14/2016	11037	8.02	8.02
## 66	1644430081	4/15/2016	5263	3.83	3.83
## 67	1644430081	4/16/2016	15300	11.12	11.12
## 68	1644430081	4/17/2016	8757	6.37	6.37
## 69	1644430081	4/18/2016	7132	5.19	5.19
## 70	1644430081	4/19/2016	11256	8.18	8.18
## 71	1644430081	4/20/2016	2436	1.77	1.77
## 72	1644430081	4/21/2016	1223	0.89	0.89
## 73	1644430081	4/22/2016	3673	2.67	2.67
## 74	1644430081	4/23/2016	6637	4.83	4.83
## 75	1644430081	4/24/2016	3321	2.41	2.41
## 76	1644430081	4/25/2016	3580	2.60	2.60
## 77	1644430081	4/26/2016	9919	7.21	7.21
## 78	1644430081	4/27/2016	3032	2.20	2.20
## 79	1644430081	4/28/2016	9405	6.84	6.84
## 80	1644430081	4/29/2016	3176	2.31	2.31
## 81	1644430081	4/30/2016	18213	13.24	13.24
## 82	1644430081	5/1/2016	6132	4.46	4.46
## 83	1644430081	5/2/2016	3758	2.73	2.73
## 84	1644430081	5/3/2016	12850	9.34	9.34
## 85	1644430081	5/4/2016	2309	1.68	1.68
## 86	1644430081	5/5/2016	4363	3.19	3.19
## 87	1644430081	5/6/2016	9787	7.12	7.12
## 88	1644430081	5/7/2016	13372	9.72	9.72
## 89	1644430081	5/8/2016	6724	4.89	4.89
## 90	1644430081	5/9/2016	6643	4.83	4.83
## 91	1644430081	5/10/2016	9167	6.66	6.66
## 92	1644430081	5/11/2016	1329	0.97	0.97
## 93	1844505072	4/12/2016	6697	4.43	4.43
## 94	1844505072	4/13/2016	4929	3.26	3.26
## 95	1844505072	4/14/2016	7937	5.25	5.25
## 96	1844505072	4/15/2016	3844	2.54	2.54
## 97	1844505072	4/16/2016	3414	2.26	2.26
## 98	1844505072	4/17/2016	4525	2.99	2.99
## 99	1844505072	4/18/2016	4597	3.04	3.04
## 100	1844505072	4/19/2016	197	0.13	0.13
## 101	1844505072	4/20/2016	8	0.01	0.01
## 102	1844505072	4/21/2016	8054	5.32	5.32
## 103	1844505072	4/22/2016	5372	3.55	3.55

## 104 1844505072	4/23/2016	3570	2.36	2.36
## 105 1844505072	4/24/2016	0	0.00	0.00
## 106 1844505072	4/25/2016	0	0.00	0.00
## 107 1844505072	4/26/2016	0	0.00	0.00
## 108 1844505072	4/27/2016	4	0.00	0.00
## 109 1844505072	4/28/2016	6907	4.57	4.57
## 110 1844505072	4/29/2016	4920	3.25	3.25
## 111 1844505072	4/30/2016	4014	2.67	2.67
## 112 1844505072	5/1/2016	2573	1.70	1.70
## 113 1844505072	5/2/2016	0	0.00	0.00
## 114 1844505072	5/3/2016	4059	2.68	2.68
## 115 1844505072	5/4/2016	2080	1.37	1.37
## 116 1844505072	5/5/2016	2237	1.48	1.48
## 117 1844505072	5/6/2016	44	0.03	0.03
## 118 1844505072	5/7/2016	0	0.00	0.00
## 119 1844505072	5/8/2016	0	0.00	0.00
## 120 1844505072	5/9/2016	0	0.00	0.00
## 121 1844505072	5/10/2016	0	0.00	0.00
## 122 1844505072	5/11/2016	0	0.00	0.00
## 123 1844505072	5/12/2016	0	0.00	0.00
## 124 1927972279	4/12/2016	678	0.47	0.47
## 125 1927972279	4/13/2016	356	0.25	0.25
## 126 1927972279	4/14/2016	2163	1.50	1.50
## 127 1927972279	4/15/2016	980	0.68	0.68
## 128 1927972279	4/16/2016	0	0.00	0.00
## 129 1927972279	4/17/2016	0	0.00	0.00
## 130 1927972279	4/18/2016	244	0.17	0.17
## 131 1927972279	4/19/2016	0	0.00	0.00
## 132 1927972279	4/20/2016	0	0.00	0.00
## 133 1927972279	4/21/2016	0	0.00	0.00
## 134 1927972279	4/22/2016	149	0.10	0.10
## 135 1927972279	4/23/2016	2945	2.04	2.04
## 136 1927972279	4/24/2016	2090	1.45	1.45
## 137 1927972279	4/25/2016	152	0.11	0.11
## 138 1927972279	4/26/2016	3761	2.60	2.60
## 139 1927972279	4/27/2016	0	0.00	0.00
## 140 1927972279	4/28/2016	1675	1.16	1.16
## 141 1927972279	4/29/2016	0	0.00	0.00
## 142 1927972279	4/30/2016	0	0.00	0.00
## 143 1927972279	5/1/2016	2704	1.87	1.87
## 144 1927972279	5/2/2016	3790	2.62	2.62
## 145 1927972279	5/3/2016	1326	0.92	0.92
## 146 1927972279	5/4/2016	1786	1.24	1.24
## 147 1927972279	5/5/2016	0	0.00	0.00
## 148 1927972279	5/6/2016	2091	1.45	1.45
## 149 1927972279	5/7/2016	1510	1.04	1.04
## 150 1927972279	5/8/2016	0	0.00	0.00
## 151 1927972279	5/9/2016	0	0.00	0.00
## 152 1927972279	5/10/2016	0	0.00	0.00
## 153 1927972279	5/11/2016	0	0.00	0.00
## 154 1927972279	5/12/2016	0	0.00	0.00
## 155 2022484408	4/12/2016	11875	8.34	8.34
## 156 2022484408	4/13/2016	12024	8.50	8.50
## 157 2022484408	4/14/2016	10690	7.50	7.50

## 158	2022484408	4/15/2016	11034	8.03	8.03
## 159	2022484408	4/16/2016	10100	7.09	7.09
## 160	2022484408	4/17/2016	15112	11.40	11.40
## 161	2022484408	4/18/2016	14131	10.07	10.07
## 162	2022484408	4/19/2016	11548	8.53	8.53
## 163	2022484408	4/20/2016	15112	10.67	10.67
## 164	2022484408	4/21/2016	12453	8.74	8.74
## 165	2022484408	4/22/2016	12954	9.33	9.33
## 166	2022484408	4/23/2016	6001	4.21	4.21
## 167	2022484408	4/24/2016	13481	10.28	10.28
## 168	2022484408	4/25/2016	11369	8.01	8.01
## 169	2022484408	4/26/2016	10119	7.19	7.19
## 170	2022484408	4/27/2016	10159	7.13	7.13
## 171	2022484408	4/28/2016	10140	7.12	7.12
## 172	2022484408	4/29/2016	10245	7.19	7.19
## 173	2022484408	4/30/2016	18387	12.91	12.91
## 174	2022484408	5/1/2016	10538	7.40	7.40
## 175	2022484408	5/2/2016	10379	7.29	7.29
## 176	2022484408	5/3/2016	12183	8.74	8.74
## 177	2022484408	5/4/2016	11768	8.29	8.29
## 178	2022484408	5/5/2016	11895	8.35	8.35
## 179	2022484408	5/6/2016	10227	7.18	7.18
## 180	2022484408	5/7/2016	6708	4.71	4.71
## 181	2022484408	5/8/2016	3292	2.31	2.31
## 182	2022484408	5/9/2016	13379	9.39	9.39
## 183	2022484408	5/10/2016	12798	8.98	8.98
## 184	2022484408	5/11/2016	13272	9.32	9.32
## 185	2022484408	5/12/2016	9117	6.41	6.41
## 186	2026352035	4/12/2016	4414	2.74	2.74
## 187	2026352035	4/13/2016	4993	3.10	3.10
## 188	2026352035	4/14/2016	3335	2.07	2.07
## 189	2026352035	4/15/2016	3821	2.37	2.37
## 190	2026352035	4/16/2016	2547	1.58	1.58
## 191	2026352035	4/17/2016	838	0.52	0.52
## 192	2026352035	4/18/2016	3325	2.06	2.06
## 193	2026352035	4/19/2016	2424	1.50	1.50
## 194	2026352035	4/20/2016	7222	4.48	4.48
## 195	2026352035	4/21/2016	2467	1.53	1.53
## 196	2026352035	4/22/2016	2915	1.81	1.81
## 197	2026352035	4/23/2016	12357	7.71	7.71
## 198	2026352035	4/24/2016	3490	2.16	2.16
## 199	2026352035	4/25/2016	6017	3.73	3.73
## 200	2026352035	4/26/2016	5933	3.68	3.68
## 201	2026352035	4/27/2016	6088	3.77	3.77
## 202	2026352035	4/28/2016	6375	3.95	3.95
## 203	2026352035	4/29/2016	7604	4.71	4.71
## 204	2026352035	4/30/2016	4729	2.93	2.93
## 205	2026352035	5/1/2016	3609	2.28	2.28
## 206	2026352035	5/2/2016	7018	4.35	4.35
## 207	2026352035	5/3/2016	5992	3.72	3.72
## 208	2026352035	5/4/2016	6564	4.07	4.07
## 209	2026352035	5/5/2016	12167	7.54	7.54
## 210	2026352035	5/6/2016	8198	5.08	5.08
## 211	2026352035	5/7/2016	4193	2.60	2.60

## 212	2026352035	5/8/2016	5528	3.45	3.45
## 213	2026352035	5/9/2016	10685	6.62	6.62
## 214	2026352035	5/10/2016	254	0.16	0.16
## 215	2026352035	5/11/2016	8580	5.32	5.32
## 216	2026352035	5/12/2016	8891	5.51	5.51
## 217	2320127002	4/12/2016	10725	7.49	7.49
## 218	2320127002	4/13/2016	7275	4.90	4.90
## 219	2320127002	4/14/2016	3973	2.68	2.68
## 220	2320127002	4/15/2016	5205	3.51	3.51
## 221	2320127002	4/16/2016	5057	3.41	3.41
## 222	2320127002	4/17/2016	6198	4.18	4.18
## 223	2320127002	4/18/2016	6559	4.42	4.42
## 224	2320127002	4/19/2016	5997	4.04	4.04
## 225	2320127002	4/20/2016	7192	4.85	4.85
## 226	2320127002	4/21/2016	3404	2.29	2.29
## 227	2320127002	4/22/2016	5583	3.76	3.76
## 228	2320127002	4/23/2016	5079	3.42	3.42
## 229	2320127002	4/24/2016	4165	2.81	2.81
## 230	2320127002	4/25/2016	3588	2.42	2.42
## 231	2320127002	4/26/2016	3409	2.30	2.30
## 232	2320127002	4/27/2016	1715	1.16	1.16
## 233	2320127002	4/28/2016	1532	1.03	1.03
## 234	2320127002	4/29/2016	924	0.62	0.62
## 235	2320127002	4/30/2016	4571	3.08	3.08
## 236	2320127002	5/1/2016	772	0.52	0.52
## 237	2320127002	5/2/2016	3634	2.45	2.45
## 238	2320127002	5/3/2016	7443	5.02	5.02
## 239	2320127002	5/4/2016	1201	0.81	0.81
## 240	2320127002	5/5/2016	5202	3.51	3.51
## 241	2320127002	5/6/2016	4878	3.29	3.29
## 242	2320127002	5/7/2016	7379	4.97	4.97
## 243	2320127002	5/8/2016	5161	3.48	3.48
## 244	2320127002	5/9/2016	3090	2.08	2.08
## 245	2320127002	5/10/2016	6227	4.20	4.20
## 246	2320127002	5/11/2016	6424	4.33	4.33
## 247	2320127002	5/12/2016	2661	1.79	1.79
## 248	2347167796	4/12/2016	10113	6.83	6.83
## 249	2347167796	4/13/2016	10352	7.01	7.01
## 250	2347167796	4/14/2016	10129	6.70	6.70
## 251	2347167796	4/15/2016	10465	6.92	6.92
## 252	2347167796	4/16/2016	22244	15.08	15.08
## 253	2347167796	4/17/2016	5472	3.62	3.62
## 254	2347167796	4/18/2016	8247	5.45	5.45
## 255	2347167796	4/19/2016	6711	4.44	4.44
## 256	2347167796	4/20/2016	10999	7.27	7.27
## 257	2347167796	4/21/2016	10080	6.75	6.75
## 258	2347167796	4/22/2016	7804	5.16	5.16
## 259	2347167796	4/23/2016	16901	11.37	11.37
## 260	2347167796	4/24/2016	9471	6.26	6.26
## 261	2347167796	4/25/2016	9482	6.38	6.38
## 262	2347167796	4/26/2016	5980	3.95	3.95
## 263	2347167796	4/27/2016	11423	7.58	7.58
## 264	2347167796	4/28/2016	5439	3.60	3.60
## 265	2347167796	4/29/2016	42	0.03	0.03

## 266	2873212765	4/12/2016	8796	5.91	5.91
## 267	2873212765	4/13/2016	7618	5.12	5.12
## 268	2873212765	4/14/2016	7910	5.32	5.32
## 269	2873212765	4/15/2016	8482	5.70	5.70
## 270	2873212765	4/16/2016	9685	6.65	6.65
## 271	2873212765	4/17/2016	2524	1.70	1.70
## 272	2873212765	4/18/2016	7762	5.24	5.24
## 273	2873212765	4/19/2016	7948	5.37	5.37
## 274	2873212765	4/20/2016	9202	6.30	6.30
## 275	2873212765	4/21/2016	8859	5.98	5.98
## 276	2873212765	4/22/2016	7286	4.90	4.90
## 277	2873212765	4/23/2016	9317	6.35	6.35
## 278	2873212765	4/24/2016	6873	4.68	4.68
## 279	2873212765	4/25/2016	7373	4.95	4.95
## 280	2873212765	4/26/2016	8242	5.54	5.54
## 281	2873212765	4/27/2016	3516	2.36	2.36
## 282	2873212765	4/28/2016	7913	5.41	5.41
## 283	2873212765	4/29/2016	7365	4.95	4.95
## 284	2873212765	4/30/2016	8452	5.68	5.68
## 285	2873212765	5/1/2016	7399	4.97	4.97
## 286	2873212765	5/2/2016	7525	5.06	5.06
## 287	2873212765	5/3/2016	7412	4.98	4.98
## 288	2873212765	5/4/2016	8278	5.56	5.56
## 289	2873212765	5/5/2016	8314	5.61	5.61
## 290	2873212765	5/6/2016	7063	4.75	4.75
## 291	2873212765	5/7/2016	4940	3.38	3.38
## 292	2873212765	5/8/2016	8168	5.54	5.54
## 293	2873212765	5/9/2016	7726	5.19	5.19
## 294	2873212765	5/10/2016	8275	5.56	5.56
## 295	2873212765	5/11/2016	6440	4.33	4.33
## 296	2873212765	5/12/2016	7566	5.11	5.11
## 297	3372868164	4/12/2016	4747	3.24	3.24
## 298	3372868164	4/13/2016	9715	6.63	6.63
## 299	3372868164	4/14/2016	8844	6.03	6.03
## 300	3372868164	4/15/2016	7451	5.08	5.08
## 301	3372868164	4/16/2016	6905	4.73	4.73
## 302	3372868164	4/17/2016	8199	5.88	5.88
## 303	3372868164	4/18/2016	6798	4.64	4.64
## 304	3372868164	4/19/2016	7711	5.26	5.26
## 305	3372868164	4/20/2016	4880	3.33	3.33
## 306	3372868164	4/21/2016	8857	6.07	6.07
## 307	3372868164	4/22/2016	3843	2.62	2.62
## 308	3372868164	4/23/2016	7396	5.07	5.07
## 309	3372868164	4/24/2016	6731	4.59	4.59
## 310	3372868164	4/25/2016	5995	4.09	4.09
## 311	3372868164	4/26/2016	8283	5.79	5.79
## 312	3372868164	4/27/2016	7904	5.42	5.42
## 313	3372868164	4/28/2016	5512	3.76	3.76
## 314	3372868164	4/29/2016	9135	6.23	6.23
## 315	3372868164	4/30/2016	5250	3.58	3.58
## 316	3372868164	5/1/2016	3077	2.10	2.10
## 317	3977333714	4/12/2016	8856	5.98	5.98
## 318	3977333714	4/13/2016	10035	6.71	6.71
## 319	3977333714	4/14/2016	7641	5.11	5.11

## 320 3977333714	4/15/2016	9010	6.06	6.06
## 321 3977333714	4/16/2016	13459	9.00	9.00
## 322 3977333714	4/17/2016	10415	6.97	6.97
## 323 3977333714	4/18/2016	11663	7.80	7.80
## 324 3977333714	4/19/2016	12414	8.78	8.78
## 325 3977333714	4/20/2016	11658	7.83	7.83
## 326 3977333714	4/21/2016	6093	4.08	4.08
## 327 3977333714	4/22/2016	8911	5.96	5.96
## 328 3977333714	4/23/2016	12058	8.07	8.07
## 329 3977333714	4/24/2016	14112	10.00	10.00
## 330 3977333714	4/25/2016	11177	8.48	8.48
## 331 3977333714	4/26/2016	11388	7.62	7.62
## 332 3977333714	4/27/2016	7193	5.04	5.04
## 333 3977333714	4/28/2016	7114	4.88	4.88
## 334 3977333714	4/29/2016	10645	7.75	7.75
## 335 3977333714	4/30/2016	13238	9.20	9.20
## 336 3977333714	5/1/2016	10414	7.07	7.07
## 337 3977333714	5/2/2016	16520	11.05	11.05
## 338 3977333714	5/3/2016	14335	9.59	9.59
## 339 3977333714	5/4/2016	13559	9.44	9.44
## 340 3977333714	5/5/2016	12312	8.58	8.58
## 341 3977333714	5/6/2016	11677	8.28	8.28
## 342 3977333714	5/7/2016	11550	7.73	7.73
## 343 3977333714	5/8/2016	13585	9.09	9.09
## 344 3977333714	5/9/2016	14687	10.08	10.08
## 345 3977333714	5/10/2016	13072	8.78	8.78
## 346 3977333714	5/11/2016	746	0.50	0.50
## 347 4020332650	4/12/2016	8539	6.12	6.12
## 348 4020332650	4/13/2016	0	0.00	0.00
## 349 4020332650	4/14/2016	108	0.08	0.08
## 350 4020332650	4/15/2016	1882	1.35	1.35
## 351 4020332650	4/16/2016	1982	1.42	1.42
## 352 4020332650	4/17/2016	16	0.01	0.01
## 353 4020332650	4/18/2016	62	0.04	0.04
## 354 4020332650	4/19/2016	0	0.00	0.00
## 355 4020332650	4/20/2016	0	0.00	0.00
## 356 4020332650	4/21/2016	0	0.00	0.00
## 357 4020332650	4/22/2016	0	0.00	0.00
## 358 4020332650	4/23/2016	0	0.00	0.00
## 359 4020332650	4/24/2016	0	0.00	0.00
## 360 4020332650	4/25/2016	0	0.00	0.00
## 361 4020332650	4/26/2016	0	0.00	0.00
## 362 4020332650	4/27/2016	0	0.00	0.00
## 363 4020332650	4/28/2016	0	0.00	0.00
## 364 4020332650	4/29/2016	0	0.00	0.00
## 365 4020332650	4/30/2016	0	0.00	0.00
## 366 4020332650	5/1/2016	0	0.00	0.00
## 367 4020332650	5/2/2016	475	0.34	0.34
## 368 4020332650	5/3/2016	4496	3.22	3.22
## 369 4020332650	5/4/2016	10252	7.35	7.35
## 370 4020332650	5/5/2016	11728	8.43	8.43
## 371 4020332650	5/6/2016	4369	3.13	3.13
## 372 4020332650	5/7/2016	6132	4.40	4.40
## 373 4020332650	5/8/2016	5862	4.20	4.20

## 590 5577150313	5/4/2016	5206	3.89	3.89
## 591 5577150313	5/5/2016	7550	5.64	5.64
## 592 5577150313	5/6/2016	4950	3.70	3.70
## 593 5577150313	5/7/2016	0	0.00	0.00
## 594 5577150313	5/8/2016	0	0.00	0.00
## 595 5577150313	5/9/2016	3421	2.56	2.56
## 596 5577150313	5/10/2016	8869	6.65	6.65
## 597 5577150313	5/11/2016	4038	3.04	3.04
## 598 6117666160	4/12/2016	0	0.00	0.00
## 599 6117666160	4/13/2016	0	0.00	0.00
## 600 6117666160	4/14/2016	0	0.00	0.00
## 601 6117666160	4/15/2016	14019	10.59	10.59
## 602 6117666160	4/16/2016	14450	10.91	10.91
## 603 6117666160	4/17/2016	7150	5.40	5.40
## 604 6117666160	4/18/2016	5153	3.91	3.91
## 605 6117666160	4/19/2016	11135	8.41	8.41
## 606 6117666160	4/20/2016	10449	8.02	8.02
## 607 6117666160	4/21/2016	19542	15.01	15.01
## 608 6117666160	4/22/2016	8206	6.20	6.20
## 609 6117666160	4/23/2016	11495	8.68	8.68
## 610 6117666160	4/24/2016	7623	5.76	5.76
## 611 6117666160	4/25/2016	0	0.00	0.00
## 612 6117666160	4/26/2016	9543	7.21	7.21
## 613 6117666160	4/27/2016	9411	7.11	7.11
## 614 6117666160	4/28/2016	3403	2.60	2.60
## 615 6117666160	4/29/2016	9592	7.24	7.24
## 616 6117666160	4/30/2016	6987	5.28	5.28
## 617 6117666160	5/1/2016	8915	6.73	6.73
## 618 6117666160	5/2/2016	4933	3.73	3.73
## 619 6117666160	5/3/2016	0	0.00	0.00
## 620 6117666160	5/4/2016	2997	2.26	2.26
## 621 6117666160	5/5/2016	9799	7.40	7.40
## 622 6117666160	5/6/2016	3365	2.68	2.68
## 623 6117666160	5/7/2016	7336	5.54	5.54
## 624 6117666160	5/8/2016	7328	5.53	5.53
## 625 6117666160	5/9/2016	4477	3.38	3.38
## 626 6290855005	4/12/2016	4562	3.45	3.45
## 627 6290855005	4/13/2016	7142	5.40	5.40
## 628 6290855005	4/14/2016	7671	5.80	5.80
## 629 6290855005	4/15/2016	9501	7.18	7.18
## 630 6290855005	4/16/2016	8301	6.28	6.28
## 631 6290855005	4/17/2016	7851	5.94	5.94
## 632 6290855005	4/18/2016	6885	5.21	5.21
## 633 6290855005	4/19/2016	7142	5.40	5.40
## 634 6290855005	4/20/2016	6361	4.81	4.81
## 635 6290855005	4/21/2016	0	0.00	0.00
## 636 6290855005	4/22/2016	6238	4.72	4.72
## 637 6290855005	4/23/2016	0	0.00	0.00
## 638 6290855005	4/24/2016	5896	4.46	4.46
## 639 6290855005	4/25/2016	7802	5.90	5.90
## 640 6290855005	4/26/2016	0	0.00	0.00
## 641 6290855005	4/27/2016	5565	4.21	4.21
## 642 6290855005	4/28/2016	5731	4.33	4.33
## 643 6290855005	4/29/2016	0	0.00	0.00

## 644 6290855005	4/30/2016	6744	5.10	5.10
## 645 6290855005	5/1/2016	9837	7.44	7.44
## 646 6290855005	5/2/2016	6781	5.13	5.13
## 647 6290855005	5/3/2016	6047	4.57	4.57
## 648 6290855005	5/4/2016	5832	4.41	4.41
## 649 6290855005	5/5/2016	6339	4.79	4.79
## 650 6290855005	5/6/2016	6116	4.62	4.62
## 651 6290855005	5/7/2016	5510	4.17	4.17
## 652 6290855005	5/8/2016	7706	5.83	5.83
## 653 6290855005	5/9/2016	6277	4.75	4.75
## 654 6290855005	5/10/2016	0	0.00	0.00
## 655 6775888955	4/12/2016	0	0.00	0.00
## 656 6775888955	4/13/2016	4053	2.91	2.91
## 657 6775888955	4/14/2016	5162	3.70	3.70
## 658 6775888955	4/15/2016	1282	0.92	0.92
## 659 6775888955	4/16/2016	4732	3.39	3.39
## 660 6775888955	4/17/2016	2497	1.79	1.79
## 661 6775888955	4/18/2016	8294	5.95	5.95
## 662 6775888955	4/19/2016	0	0.00	0.00
## 663 6775888955	4/20/2016	10771	7.72	7.72
## 664 6775888955	4/21/2016	0	0.00	0.00
## 665 6775888955	4/22/2016	637	0.46	0.46
## 666 6775888955	4/23/2016	0	0.00	0.00
## 667 6775888955	4/24/2016	2153	1.54	1.54
## 668 6775888955	4/25/2016	6474	4.64	4.64
## 669 6775888955	4/26/2016	7091	5.27	5.27
## 670 6775888955	4/27/2016	0	0.00	0.00
## 671 6775888955	4/28/2016	703	0.50	0.50
## 672 6775888955	4/29/2016	0	0.00	0.00
## 673 6775888955	4/30/2016	2503	1.79	1.79
## 674 6775888955	5/1/2016	2487	1.78	1.78
## 675 6775888955	5/2/2016	0	0.00	0.00
## 676 6775888955	5/3/2016	9	0.01	0.01
## 677 6775888955	5/4/2016	0	0.00	0.00
## 678 6775888955	5/5/2016	0	0.00	0.00
## 679 6775888955	5/6/2016	4697	3.37	3.37
## 680 6775888955	5/7/2016	1967	1.41	1.41
## 681 6962181067	4/12/2016	10199	6.74	6.74
## 682 6962181067	4/13/2016	5652	3.74	3.74
## 683 6962181067	4/14/2016	1551	1.03	1.03
## 684 6962181067	4/15/2016	5563	3.68	3.68
## 685 6962181067	4/16/2016	13217	8.74	8.74
## 686 6962181067	4/17/2016	10145	6.71	6.71
## 687 6962181067	4/18/2016	11404	7.54	7.54
## 688 6962181067	4/19/2016	10742	7.10	7.10
## 689 6962181067	4/20/2016	13928	9.55	9.55
## 690 6962181067	4/21/2016	11835	9.71	7.88
## 691 6962181067	4/22/2016	10725	7.09	7.09
## 692 6962181067	4/23/2016	20031	13.24	13.24
## 693 6962181067	4/24/2016	5029	3.32	3.32
## 694 6962181067	4/25/2016	13239	9.27	9.08
## 695 6962181067	4/26/2016	10433	6.90	6.90
## 696 6962181067	4/27/2016	10320	6.82	6.82
## 697 6962181067	4/28/2016	12627	8.35	8.35

## 860 8583815059	4/22/2016	8687	6.78	6.78
## 861 8583815059	4/23/2016	9423	7.35	7.35
## 862 8583815059	4/24/2016	8286	6.46	6.46
## 863 8583815059	4/25/2016	4503	3.51	3.51
## 864 8583815059	4/26/2016	10499	8.19	8.19
## 865 8583815059	4/27/2016	12474	9.73	9.73
## 866 8583815059	4/28/2016	6174	4.82	4.82
## 867 8583815059	4/29/2016	15168	11.83	11.83
## 868 8583815059	4/30/2016	10085	7.87	7.87
## 869 8583815059	5/1/2016	4512	3.52	3.52
## 870 8583815059	5/2/2016	8469	6.61	6.61
## 871 8583815059	5/3/2016	12015	9.37	9.37
## 872 8583815059	5/4/2016	3588	2.80	2.80
## 873 8583815059	5/5/2016	12427	9.69	9.69
## 874 8583815059	5/6/2016	5843	4.56	4.56
## 875 8583815059	5/7/2016	6117	4.77	4.77
## 876 8583815059	5/8/2016	9217	7.19	7.19
## 877 8583815059	5/9/2016	9877	7.70	7.70
## 878 8583815059	5/10/2016	8240	6.43	6.43
## 879 8583815059	5/11/2016	8701	6.79	6.79
## 880 8583815059	5/12/2016	0	0.00	0.00
## 881 8792009665	4/12/2016	2564	1.64	1.64
## 882 8792009665	4/13/2016	1320	0.84	0.84
## 883 8792009665	4/14/2016	1219	0.78	0.78
## 884 8792009665	4/15/2016	2483	1.59	1.59
## 885 8792009665	4/16/2016	244	0.16	0.16
## 886 8792009665	4/17/2016	0	0.00	0.00
## 887 8792009665	4/18/2016	0	0.00	0.00
## 888 8792009665	4/19/2016	0	0.00	0.00
## 889 8792009665	4/20/2016	3147	2.01	2.01
## 890 8792009665	4/21/2016	144	0.09	0.09
## 891 8792009665	4/22/2016	4068	2.60	2.60
## 892 8792009665	4/23/2016	5245	3.36	3.36
## 893 8792009665	4/24/2016	400	0.26	0.26
## 894 8792009665	4/25/2016	0	0.00	0.00
## 895 8792009665	4/26/2016	1321	0.85	0.85
## 896 8792009665	4/27/2016	1758	1.13	1.13
## 897 8792009665	4/28/2016	6157	3.94	3.94
## 898 8792009665	4/29/2016	8360	5.35	5.35
## 899 8792009665	4/30/2016	7174	4.59	4.59
## 900 8792009665	5/1/2016	1619	1.04	1.04
## 901 8792009665	5/2/2016	1831	1.17	1.17
## 902 8792009665	5/3/2016	2421	1.55	1.55
## 903 8792009665	5/4/2016	2283	1.46	1.46
## 904 8792009665	5/5/2016	0	0.00	0.00
## 905 8792009665	5/6/2016	0	0.00	0.00
## 906 8792009665	5/7/2016	0	0.00	0.00
## 907 8792009665	5/8/2016	0	0.00	0.00
## 908 8792009665	5/9/2016	0	0.00	0.00
## 909 8792009665	5/10/2016	0	0.00	0.00
## 910 8877689391	4/12/2016	23186	20.40	20.40
## 911 8877689391	4/13/2016	15337	9.58	9.58
## 912 8877689391	4/14/2016	21129	18.98	18.98
## 913 8877689391	4/15/2016	13422	7.17	7.17

## 914 8877689391	4/16/2016	29326	25.29	25.29
## 915 8877689391	4/17/2016	15118	8.87	8.87
## 916 8877689391	4/18/2016	11423	8.67	8.67
## 917 8877689391	4/19/2016	18785	17.40	17.40
## 918 8877689391	4/20/2016	19948	18.11	18.11
## 919 8877689391	4/21/2016	19377	17.62	17.62
## 920 8877689391	4/22/2016	18258	16.31	16.31
## 921 8877689391	4/23/2016	11200	7.43	7.43
## 922 8877689391	4/24/2016	16674	15.74	15.74
## 923 8877689391	4/25/2016	12986	8.74	8.74
## 924 8877689391	4/26/2016	11101	8.43	8.43
## 925 8877689391	4/27/2016	23629	20.65	20.65
## 926 8877689391	4/28/2016	14890	11.30	11.30
## 927 8877689391	4/29/2016	9733	7.39	7.39
## 928 8877689391	4/30/2016	27745	26.72	26.72
## 929 8877689391	5/1/2016	10930	8.32	8.32
## 930 8877689391	5/2/2016	4790	3.64	3.64
## 931 8877689391	5/3/2016	10818	8.21	8.21
## 932 8877689391	5/4/2016	18193	16.30	16.30
## 933 8877689391	5/5/2016	14055	10.67	10.67
## 934 8877689391	5/6/2016	21727	19.34	19.34
## 935 8877689391	5/7/2016	12332	8.13	8.13
## 936 8877689391	5/8/2016	10686	8.11	8.11
## 937 8877689391	5/9/2016	20226	18.25	18.25
## 938 8877689391	5/10/2016	10733	8.15	8.15
## 939 8877689391	5/11/2016	21420	19.56	19.56
## 940 8877689391	5/12/2016	8064	6.12	6.12
## logged_activities_distance very_active_distance moderately_active_distance				
## 1	0.000000	1.88	0.55	
## 2	0.000000	1.57	0.69	
## 3	0.000000	2.44	0.40	
## 4	0.000000	2.14	1.26	
## 5	0.000000	2.71	0.41	
## 6	0.000000	3.19	0.78	
## 7	0.000000	3.25	0.64	
## 8	0.000000	3.53	1.32	
## 9	0.000000	1.96	0.48	
## 10	0.000000	1.34	0.35	
## 11	0.000000	4.76	1.12	
## 12	0.000000	2.81	0.87	
## 13	0.000000	2.92	0.21	
## 14	0.000000	5.29	0.57	
## 15	0.000000	2.33	0.92	
## 16	0.000000	6.40	0.41	
## 17	0.000000	3.54	1.16	
## 18	0.000000	1.06	0.50	
## 19	0.000000	3.56	1.42	
## 20	0.000000	2.29	1.60	
## 21	0.000000	3.21	0.57	
## 22	0.000000	3.73	1.05	
## 23	0.000000	2.46	0.87	
## 24	0.000000	2.92	1.08	
## 25	0.000000	1.97	0.25	
## 26	0.000000	2.46	2.12	

## 27	0.000000	3.53	0.32
## 28	0.000000	3.45	0.53
## 29	0.000000	3.35	1.16
## 30	0.000000	2.56	1.01
## 31	0.000000	0.00	0.00
## 32	0.000000	0.00	0.00
## 33	0.000000	0.00	0.00
## 34	0.000000	0.00	0.00
## 35	0.000000	0.00	0.00
## 36	0.000000	0.00	0.00
## 37	0.000000	1.03	1.52
## 38	0.000000	2.15	0.62
## 39	0.000000	0.00	0.00
## 40	0.000000	0.00	0.00
## 41	0.000000	0.00	0.00
## 42	0.000000	0.00	0.00
## 43	0.000000	0.00	0.00
## 44	0.000000	1.15	0.91
## 45	0.000000	0.00	0.00
## 46	0.000000	0.00	0.00
## 47	0.000000	1.11	1.87
## 48	0.000000	0.00	0.20
## 49	0.000000	0.00	0.00
## 50	0.000000	0.90	1.28
## 51	0.000000	21.92	4.19
## 52	0.000000	0.86	0.59
## 53	0.000000	0.00	0.00
## 54	0.000000	0.00	0.00
## 55	0.000000	0.00	0.00
## 56	0.000000	0.00	0.00
## 57	0.000000	0.00	0.00
## 58	0.000000	0.00	0.00
## 59	0.000000	0.00	0.00
## 60	0.000000	0.00	0.00
## 61	0.000000	0.00	0.00
## 62	0.000000	0.00	0.00
## 63	0.000000	0.14	2.30
## 64	0.000000	2.28	0.90
## 65	0.000000	0.36	2.56
## 66	0.000000	0.22	0.15
## 67	0.000000	4.10	1.88
## 68	0.000000	2.25	0.57
## 69	0.000000	1.07	1.67
## 70	0.000000	0.36	2.53
## 71	0.000000	0.00	0.00
## 72	0.000000	0.00	0.00
## 73	0.000000	0.00	0.00
## 74	0.000000	0.00	0.58
## 75	0.000000	0.00	0.00
## 76	0.000000	0.59	0.06
## 77	0.000000	0.80	1.72
## 78	0.000000	0.00	0.00
## 79	0.000000	0.20	2.32
## 80	0.000000	0.00	0.00

## 81	0.000000	0.63	3.14
## 82	0.000000	0.24	0.99
## 83	0.000000	0.07	0.31
## 84	0.000000	0.72	4.09
## 85	0.000000	0.00	0.00
## 86	0.000000	0.52	0.54
## 87	0.000000	0.82	0.27
## 88	0.000000	3.26	0.79
## 89	0.000000	0.00	0.00
## 90	0.000000	2.39	0.35
## 91	0.000000	0.88	0.81
## 92	0.000000	0.00	0.00
## 93	0.000000	0.00	0.00
## 94	0.000000	0.00	0.00
## 95	0.000000	0.00	0.00
## 96	0.000000	0.00	0.00
## 97	0.000000	0.00	0.00
## 98	0.000000	0.14	0.26
## 99	0.000000	0.00	0.48
## 100	0.000000	0.00	0.00
## 101	0.000000	0.00	0.00
## 102	0.000000	0.12	0.52
## 103	0.000000	0.00	0.00
## 104	0.000000	0.00	0.00
## 105	0.000000	0.00	0.00
## 106	0.000000	0.00	0.00
## 107	0.000000	0.00	0.00
## 108	0.000000	0.00	0.00
## 109	0.000000	0.00	0.00
## 110	0.000000	0.00	0.00
## 111	0.000000	0.00	0.00
## 112	0.000000	0.00	0.26
## 113	0.000000	0.00	0.00
## 114	0.000000	0.00	0.00
## 115	0.000000	0.00	0.00
## 116	0.000000	0.00	0.00
## 117	0.000000	0.00	0.00
## 118	0.000000	0.00	0.00
## 119	0.000000	0.00	0.00
## 120	0.000000	0.00	0.00
## 121	0.000000	0.00	0.00
## 122	0.000000	0.00	0.00
## 123	0.000000	0.00	0.00
## 124	0.000000	0.00	0.00
## 125	0.000000	0.00	0.00
## 126	0.000000	0.00	0.40
## 127	0.000000	0.00	0.00
## 128	0.000000	0.00	0.00
## 129	0.000000	0.00	0.00
## 130	0.000000	0.00	0.00
## 131	0.000000	0.00	0.00
## 132	0.000000	0.00	0.00
## 133	0.000000	0.00	0.00
## 134	0.000000	0.00	0.00

## 135	0.000000	0.00	0.00
## 136	0.000000	0.07	0.24
## 137	0.000000	0.00	0.00
## 138	0.000000	0.00	0.00
## 139	0.000000	0.00	0.00
## 140	0.000000	0.00	0.00
## 141	0.000000	0.00	0.00
## 142	0.000000	0.00	0.00
## 143	0.000000	1.01	0.03
## 144	0.000000	1.16	0.30
## 145	0.000000	0.73	0.00
## 146	0.000000	0.00	0.00
## 147	0.000000	0.00	0.00
## 148	0.000000	0.00	0.00
## 149	0.000000	0.00	0.00
## 150	0.000000	0.00	0.00
## 151	0.000000	0.00	0.00
## 152	0.000000	0.00	0.00
## 153	0.000000	0.00	0.00
## 154	0.000000	0.00	0.00
## 155	0.000000	3.31	0.77
## 156	0.000000	2.99	0.10
## 157	0.000000	2.48	0.21
## 158	0.000000	1.94	0.31
## 159	0.000000	3.15	0.55
## 160	0.000000	3.87	0.66
## 161	0.000000	3.64	0.12
## 162	0.000000	3.29	0.24
## 163	0.000000	3.34	1.93
## 164	0.000000	3.33	1.11
## 165	0.000000	4.43	0.42
## 166	0.000000	0.00	0.00
## 167	0.000000	4.55	1.15
## 168	0.000000	3.33	0.22
## 169	0.000000	1.43	0.66
## 170	0.000000	1.04	0.97
## 171	0.000000	0.41	1.33
## 172	0.000000	0.48	1.21
## 173	0.000000	0.94	1.40
## 174	0.000000	1.94	0.96
## 175	0.000000	2.61	0.34
## 176	0.000000	3.99	0.46
## 177	0.000000	2.51	0.93
## 178	0.000000	2.79	0.86
## 179	0.000000	1.87	0.67
## 180	0.000000	1.61	0.08
## 181	0.000000	0.00	0.00
## 182	0.000000	2.12	1.63
## 183	0.000000	2.22	1.21
## 184	0.000000	4.18	1.15
## 185	0.000000	1.28	0.67
## 186	0.000000	0.19	0.35
## 187	0.000000	0.00	0.00
## 188	0.000000	0.00	0.00

## 189	0.000000	0.00	0.00
## 190	0.000000	0.00	0.00
## 191	0.000000	0.00	0.00
## 192	0.000000	0.00	0.00
## 193	0.000000	0.00	0.00
## 194	0.000000	0.00	0.00
## 195	0.000000	0.00	0.00
## 196	0.000000	0.00	0.00
## 197	0.000000	0.00	0.00
## 198	0.000000	0.00	0.00
## 199	0.000000	0.00	0.00
## 200	0.000000	0.00	0.00
## 201	0.000000	0.00	0.00
## 202	0.000000	0.00	0.00
## 203	0.000000	0.00	0.00
## 204	0.000000	0.00	0.00
## 205	0.000000	0.00	0.00
## 206	0.000000	0.00	0.00
## 207	0.000000	0.00	0.00
## 208	0.000000	0.00	0.00
## 209	0.000000	0.00	0.00
## 210	0.000000	0.00	0.00
## 211	0.000000	0.00	0.00
## 212	0.000000	0.00	0.00
## 213	0.000000	0.00	0.00
## 214	0.000000	0.00	0.00
## 215	0.000000	0.00	0.00
## 216	0.000000	0.00	0.00
## 217	0.000000	1.17	0.31
## 218	0.000000	0.00	0.00
## 219	0.000000	0.00	0.00
## 220	0.000000	0.00	0.00
## 221	0.000000	0.00	0.00
## 222	0.000000	0.00	0.00
## 223	0.000000	0.00	0.26
## 224	0.000000	0.00	0.38
## 225	0.000000	0.00	0.49
## 226	0.000000	0.06	0.42
## 227	0.000000	0.00	0.00
## 228	0.000000	0.00	0.00
## 229	0.000000	0.00	0.00
## 230	0.000000	0.23	0.20
## 231	0.000000	0.00	0.00
## 232	0.000000	0.00	0.00
## 233	0.000000	0.00	0.00
## 234	0.000000	0.00	0.00
## 235	0.000000	0.00	0.00
## 236	0.000000	0.00	0.00
## 237	0.000000	0.36	0.21
## 238	0.000000	1.49	0.37
## 239	0.000000	0.00	0.00
## 240	0.000000	0.00	0.39
## 241	0.000000	0.00	0.00
## 242	0.000000	0.00	0.00

## 243	0.000000	0.00	0.00
## 244	0.000000	0.00	0.00
## 245	0.000000	0.00	0.00
## 246	0.000000	0.00	0.00
## 247	0.000000	0.00	0.00
## 248	0.000000	2.00	0.62
## 249	0.000000	1.66	1.94
## 250	0.000000	0.02	2.74
## 251	0.000000	0.07	1.42
## 252	0.000000	5.45	4.10
## 253	0.000000	0.08	0.28
## 254	0.000000	0.79	0.86
## 255	0.000000	0.00	0.00
## 256	0.000000	0.68	1.81
## 257	0.000000	1.85	1.53
## 258	0.000000	0.56	1.68
## 259	0.000000	2.78	1.45
## 260	0.000000	0.00	0.00
## 261	0.000000	1.27	0.52
## 262	0.000000	0.00	0.00
## 263	0.000000	1.86	0.40
## 264	0.000000	0.00	0.00
## 265	0.000000	0.00	0.00
## 266	0.000000	0.11	0.93
## 267	0.000000	0.00	0.22
## 268	0.000000	0.00	0.00
## 269	0.000000	0.00	0.00
## 270	0.000000	3.11	0.02
## 271	0.000000	0.00	0.35
## 272	0.000000	0.07	0.28
## 273	0.000000	0.00	0.00
## 274	0.000000	1.51	0.12
## 275	0.000000	0.13	0.37
## 276	0.000000	0.46	0.00
## 277	0.000000	2.09	0.23
## 278	0.000000	3.00	0.06
## 279	0.000000	0.00	0.00
## 280	0.000000	0.12	0.18
## 281	0.000000	0.00	0.00
## 282	0.000000	2.16	0.34
## 283	0.000000	1.36	1.41
## 284	0.000000	0.33	1.08
## 285	0.000000	0.49	1.04
## 286	0.000000	0.00	0.21
## 287	0.000000	0.06	0.25
## 288	0.000000	0.00	0.00
## 289	0.000000	0.78	0.80
## 290	0.000000	0.00	0.12
## 291	0.000000	2.28	0.55
## 292	0.000000	2.90	0.00
## 293	0.000000	0.00	0.00
## 294	0.000000	0.00	0.00
## 295	0.000000	0.00	0.00
## 296	0.000000	0.00	0.00

## 297	0.000000	0.00	0.00
## 298	0.000000	0.99	0.34
## 299	0.000000	0.34	1.03
## 300	0.000000	0.00	0.00
## 301	0.000000	0.00	0.00
## 302	0.000000	1.41	0.10
## 303	0.000000	1.08	0.20
## 304	0.000000	0.00	0.00
## 305	0.000000	0.84	0.09
## 306	0.000000	1.15	0.26
## 307	0.000000	0.00	0.00
## 308	0.000000	1.40	0.08
## 309	0.000000	0.89	0.19
## 310	0.000000	0.00	0.00
## 311	0.000000	1.85	0.05
## 312	0.000000	1.58	0.63
## 313	0.000000	0.00	0.00
## 314	0.000000	0.00	0.00
## 315	0.000000	1.06	0.09
## 316	0.000000	0.00	0.00
## 317	0.000000	3.06	0.91
## 318	0.000000	2.03	2.13
## 319	0.000000	0.32	0.97
## 320	0.000000	1.05	1.75
## 321	0.000000	2.03	4.00
## 322	0.000000	0.70	2.35
## 323	0.000000	0.25	3.73
## 324	0.000000	2.24	2.45
## 325	0.000000	0.20	4.35
## 326	0.000000	0.00	0.00
## 327	0.000000	2.33	0.58
## 328	0.000000	0.00	4.22
## 329	0.000000	3.27	4.56
## 330	0.000000	5.62	0.43
## 331	0.000000	0.45	4.22
## 332	0.000000	0.00	0.42
## 333	0.000000	1.37	0.29
## 334	0.000000	3.74	1.30
## 335	0.000000	3.69	2.10
## 336	0.000000	2.67	1.98
## 337	0.000000	1.54	6.48
## 338	0.000000	3.32	1.74
## 339	0.000000	1.81	4.58
## 340	0.000000	1.76	4.11
## 341	0.000000	3.11	2.51
## 342	0.000000	0.00	4.13
## 343	0.000000	0.68	5.24
## 344	0.000000	0.77	5.60
## 345	0.000000	0.07	5.40
## 346	0.000000	0.37	0.00
## 347	0.000000	0.15	0.24
## 348	0.000000	0.00	0.00
## 349	0.000000	0.00	0.00
## 350	0.000000	0.21	0.36

## 351	0.000000	0.45	0.37
## 352	0.000000	0.00	0.00
## 353	0.000000	0.00	0.00
## 354	0.000000	0.00	0.00
## 355	0.000000	0.00	0.00
## 356	0.000000	0.00	0.00
## 357	0.000000	0.00	0.00
## 358	0.000000	0.00	0.00
## 359	0.000000	0.00	0.00
## 360	0.000000	0.00	0.00
## 361	0.000000	0.00	0.00
## 362	0.000000	0.00	0.00
## 363	0.000000	0.00	0.00
## 364	0.000000	0.00	0.00
## 365	0.000000	0.00	0.00
## 366	0.000000	0.00	0.00
## 367	0.000000	0.00	0.04
## 368	0.000000	0.00	0.00
## 369	0.000000	0.67	1.04
## 370	0.000000	2.62	1.68
## 371	0.000000	0.00	0.00
## 372	0.000000	0.00	0.00
## 373	0.000000	0.00	0.00
## 374	0.000000	0.20	0.12
## 375	0.000000	0.00	0.00
## 376	0.000000	0.11	0.17
## 377	0.000000	0.00	0.00
## 378	0.000000	0.00	0.00
## 379	0.000000	0.00	0.00
## 380	0.000000	0.00	0.00
## 381	0.000000	0.21	0.26
## 382	0.000000	0.00	0.00
## 383	0.000000	0.53	0.59
## 384	0.000000	0.11	0.33
## 385	0.000000	0.00	0.00
## 386	0.000000	0.00	0.00
## 387	0.000000	0.00	0.00
## 388	0.000000	0.07	0.33
## 389	0.000000	0.00	0.00
## 390	0.000000	0.00	0.68
## 391	0.000000	0.00	0.00
## 392	0.000000	0.06	0.81
## 393	0.000000	0.00	0.00
## 394	0.000000	0.06	0.20
## 395	0.000000	0.00	0.28
## 396	0.000000	0.57	0.92
## 397	0.000000	0.41	1.92
## 398	0.000000	1.01	0.33
## 399	0.000000	0.45	0.79
## 400	0.000000	0.40	1.61
## 401	0.000000	0.00	0.00
## 402	0.000000	0.00	0.44
## 403	0.000000	0.58	1.07
## 404	0.000000	0.59	0.58

## 405	0.000000	2.63	1.41
## 406	0.000000	0.41	0.47
## 407	0.000000	0.19	1.05
## 408	0.000000	0.00	0.00
## 409	0.000000	0.14	0.56
## 410	0.000000	0.21	0.46
## 411	0.000000	0.20	0.74
## 412	0.000000	0.00	0.00
## 413	0.000000	0.00	0.00
## 414	0.000000	0.06	0.63
## 415	0.000000	0.13	1.07
## 416	0.000000	0.00	0.00
## 417	0.000000	0.21	0.40
## 418	0.000000	0.00	0.00
## 419	0.000000	3.56	0.40
## 420	0.000000	1.37	0.69
## 421	0.000000	1.10	1.72
## 422	0.000000	0.37	0.39
## 423	0.000000	3.30	1.11
## 424	0.000000	4.50	0.32
## 425	0.000000	1.08	0.51
## 426	0.000000	0.73	1.40
## 427	0.000000	0.94	1.06
## 428	0.000000	0.70	2.51
## 429	0.000000	1.29	0.43
## 430	0.000000	0.80	0.89
## 431	0.000000	0.70	2.00
## 432	0.000000	1.01	0.68
## 433	0.000000	3.77	0.08
## 434	0.000000	1.13	0.78
## 435	0.000000	2.79	0.93
## 436	0.000000	0.63	1.67
## 437	0.000000	2.11	2.09
## 438	0.000000	9.45	2.77
## 439	0.000000	9.89	1.26
## 440	0.000000	0.34	0.73
## 441	0.000000	0.81	0.65
## 442	0.000000	0.53	0.79
## 443	0.000000	0.00	0.00
## 444	0.000000	0.00	0.00
## 445	0.000000	0.00	0.00
## 446	0.000000	0.00	0.00
## 447	0.000000	0.00	0.00
## 448	0.000000	0.00	0.00
## 449	0.000000	0.00	0.00
## 450	0.000000	2.00	0.29
## 451	0.000000	0.00	0.00
## 452	0.000000	0.00	0.00
## 453	0.000000	0.00	0.00
## 454	0.000000	0.00	0.00
## 455	0.000000	0.00	0.00
## 456	0.000000	0.00	0.00
## 457	0.000000	0.00	0.00
## 458	0.000000	2.41	0.04

## 459	0.000000	2.62	0.03
## 460	0.000000	0.00	0.00
## 461	0.000000	0.00	0.00
## 462	0.000000	0.00	0.00
## 463	0.000000	0.00	0.00
## 464	0.000000	2.21	0.19
## 465	0.000000	2.48	0.11
## 466	0.000000	0.00	0.00
## 467	0.000000	0.12	0.24
## 468	0.000000	0.00	0.00
## 469	0.000000	2.13	0.19
## 470	0.000000	0.00	0.25
## 471	0.000000	0.00	0.00
## 472	0.000000	0.00	0.00
## 473	0.000000	2.25	1.00
## 474	0.000000	0.00	0.00
## 475	0.000000	0.00	0.00
## 476	0.000000	1.24	0.44
## 477	0.000000	0.00	0.00
## 478	0.000000	0.59	0.84
## 479	0.000000	0.55	0.75
## 480	0.000000	0.55	1.14
## 481	0.000000	0.98	0.93
## 482	0.000000	0.05	0.36
## 483	0.000000	0.00	0.00
## 484	0.000000	0.42	0.97
## 485	0.000000	1.37	1.50
## 486	0.000000	0.34	0.20
## 487	0.000000	0.00	0.00
## 488	0.000000	0.59	0.25
## 489	0.000000	0.43	2.03
## 490	0.000000	1.96	0.89
## 491	0.000000	0.02	0.27
## 492	0.000000	1.02	1.85
## 493	0.000000	0.47	1.89
## 494	0.000000	0.00	0.00
## 495	0.000000	0.00	0.00
## 496	0.000000	0.60	0.28
## 497	0.000000	0.00	0.00
## 498	0.000000	1.01	0.50
## 499	0.000000	0.00	0.00
## 500	0.000000	1.61	1.00
## 501	0.000000	1.80	0.50
## 502	0.000000	0.43	1.62
## 503	0.000000	0.74	1.12
## 504	0.000000	0.26	1.82
## 505	0.000000	0.00	0.00
## 506	0.000000	0.00	0.00
## 507	0.000000	0.00	0.00
## 508	0.000000	0.00	0.00
## 509	0.000000	0.07	0.42
## 510	0.000000	0.24	1.25
## 511	0.000000	0.96	3.46
## 512	0.000000	1.82	1.49

## 513	0.000000	0.88	0.37
## 514	0.000000	0.16	1.23
## 515	0.000000	0.31	2.05
## 516	0.000000	0.00	0.00
## 517	0.000000	0.76	3.24
## 518	0.000000	1.20	5.12
## 519	0.000000	0.49	0.82
## 520	0.000000	0.07	0.35
## 521	0.000000	0.09	0.80
## 522	0.000000	1.13	0.42
## 523	0.000000	1.06	0.92
## 524	0.000000	0.32	2.03
## 525	0.000000	0.00	0.00
## 526	0.000000	0.38	1.74
## 527	0.000000	0.00	0.00
## 528	0.000000	0.34	0.73
## 529	0.000000	0.67	0.22
## 530	0.000000	0.08	0.66
## 531	0.000000	0.37	2.31
## 532	0.000000	0.68	6.21
## 533	0.000000	0.00	0.57
## 534	0.000000	0.08	1.88
## 535	0.000000	0.78	2.16
## 536	0.000000	0.00	0.00
## 537	0.000000	1.37	0.79
## 538	0.000000	0.00	0.00
## 539	0.000000	4.00	2.45
## 540	0.000000	4.16	1.98
## 541	0.000000	0.00	0.00
## 542	0.000000	0.00	0.00
## 543	0.000000	0.00	0.00
## 544	0.000000	4.28	1.66
## 545	0.000000	0.00	0.00
## 546	0.000000	2.95	2.16
## 547	0.000000	1.38	0.63
## 548	0.000000	0.00	0.00
## 549	0.000000	0.00	0.00
## 550	0.000000	2.93	0.57
## 551	0.000000	2.37	0.93
## 552	0.000000	1.14	1.00
## 553	0.000000	3.71	0.75
## 554	0.000000	2.79	0.64
## 555	0.000000	0.00	0.00
## 556	0.000000	0.00	0.00
## 557	0.000000	1.06	0.41
## 558	0.000000	1.50	1.20
## 559	0.000000	0.00	0.00
## 560	0.000000	3.43	1.66
## 561	0.000000	1.52	0.54
## 562	0.000000	0.00	0.00
## 563	0.000000	0.22	0.47
## 564	0.000000	2.13	0.89
## 565	0.000000	3.87	1.61
## 566	0.000000	0.00	0.00

## 567	0.000000	0.58	0.40
## 568	0.000000	3.60	0.38
## 569	0.000000	0.32	0.22
## 570	0.000000	3.33	0.31
## 571	0.000000	3.92	1.60
## 572	0.000000	6.64	1.28
## 573	0.000000	5.98	0.83
## 574	0.000000	4.86	0.72
## 575	0.000000	7.02	0.64
## 576	0.000000	4.12	0.34
## 577	0.000000	3.65	1.66
## 578	0.000000	2.42	0.79
## 579	0.000000	1.21	0.36
## 580	0.000000	7.65	2.15
## 581	0.000000	1.35	0.67
## 582	0.000000	0.85	0.65
## 583	0.000000	1.81	0.40
## 584	0.000000	3.25	1.17
## 585	0.000000	2.84	0.61
## 586	0.000000	5.83	0.79
## 587	0.000000	5.31	1.44
## 588	0.000000	1.12	0.35
## 589	0.000000	4.52	0.15
## 590	0.000000	1.56	0.25
## 591	0.000000	2.50	0.47
## 592	0.000000	1.93	0.32
## 593	0.000000	0.00	0.00
## 594	0.000000	0.00	0.00
## 595	0.000000	1.43	0.14
## 596	0.000000	2.56	0.75
## 597	0.000000	1.83	0.30
## 598	0.000000	0.00	0.00
## 599	0.000000	0.00	0.00
## 600	0.000000	0.00	0.00
## 601	0.000000	0.00	0.28
## 602	0.000000	0.58	0.85
## 603	0.000000	0.00	0.00
## 604	0.000000	0.00	0.00
## 605	0.000000	0.00	0.00
## 606	0.000000	2.03	0.48
## 607	0.000000	0.98	0.40
## 608	0.000000	0.00	0.00
## 609	0.000000	0.00	0.00
## 610	0.000000	0.00	0.00
## 611	0.000000	0.00	0.00
## 612	0.000000	0.00	0.34
## 613	0.000000	0.00	0.00
## 614	0.000000	0.00	0.00
## 615	0.000000	0.00	0.00
## 616	0.000000	0.00	0.00
## 617	0.000000	0.00	0.00
## 618	0.000000	0.00	0.00
## 619	0.000000	0.00	0.00
## 620	0.000000	0.00	0.00

## 621	0.000000	0.00	0.00
## 622	0.000000	0.00	0.00
## 623	0.000000	0.00	0.00
## 624	0.000000	0.00	0.00
## 625	0.000000	0.00	0.00
## 626	0.000000	0.00	0.00
## 627	0.000000	0.00	0.00
## 628	0.000000	0.00	0.00
## 629	0.000000	0.00	0.00
## 630	0.000000	0.00	0.00
## 631	0.000000	1.14	0.79
## 632	0.000000	0.00	0.00
## 633	0.000000	0.00	0.00
## 634	0.000000	0.00	0.00
## 635	0.000000	0.00	0.00
## 636	0.000000	0.00	0.00
## 637	0.000000	0.00	0.00
## 638	0.000000	0.00	0.00
## 639	0.000000	0.68	0.18
## 640	0.000000	0.00	0.00
## 641	0.000000	0.00	0.00
## 642	0.000000	0.00	0.00
## 643	0.000000	0.00	0.00
## 644	0.000000	0.00	0.00
## 645	0.000000	0.66	2.75
## 646	0.000000	0.00	0.00
## 647	0.000000	0.00	0.00
## 648	0.000000	0.00	0.00
## 649	0.000000	0.00	0.00
## 650	0.000000	0.00	0.00
## 651	0.000000	0.00	0.00
## 652	0.000000	0.00	0.00
## 653	0.000000	0.00	0.00
## 654	0.000000	0.00	0.00
## 655	0.000000	0.00	0.00
## 656	0.000000	1.11	0.58
## 657	0.000000	0.87	0.86
## 658	0.000000	0.00	0.00
## 659	0.000000	2.52	0.81
## 660	0.000000	0.35	1.13
## 661	0.000000	2.00	0.77
## 662	0.000000	0.00	0.00
## 663	0.000000	3.77	1.74
## 664	0.000000	0.00	0.00
## 665	0.000000	0.00	0.00
## 666	0.000000	0.00	0.00
## 667	0.000000	0.77	0.62
## 668	0.000000	2.27	0.46
## 669	1.959596	3.48	0.87
## 670	0.000000	0.00	0.00
## 671	0.000000	0.06	0.20
## 672	0.000000	0.00	0.00
## 673	0.000000	0.16	0.16
## 674	0.000000	0.48	0.62

## 675	0.000000	0.00	0.00
## 676	0.000000	0.00	0.00
## 677	0.000000	0.00	0.00
## 678	0.000000	0.00	0.00
## 679	0.000000	0.47	0.93
## 680	0.000000	0.13	0.24
## 681	0.000000	3.40	0.83
## 682	0.000000	0.57	1.21
## 683	0.000000	0.00	0.00
## 684	0.000000	0.00	0.00
## 685	0.000000	3.66	0.19
## 686	0.000000	0.33	0.68
## 687	0.000000	0.83	2.39
## 688	0.000000	2.10	2.13
## 689	0.000000	4.28	0.19
## 690	4.081692	3.99	2.10
## 691	0.000000	1.77	1.55
## 692	0.000000	4.20	2.00
## 693	0.000000	0.00	0.00
## 694	2.785175	3.02	1.68
## 695	0.000000	2.58	0.42
## 696	0.000000	0.55	2.02
## 697	0.000000	2.51	0.24
## 698	0.000000	0.82	0.48
## 699	0.000000	2.24	0.76
## 700	0.000000	0.00	0.00
## 701	0.000000	1.20	2.00
## 702	0.000000	1.74	2.04
## 703	0.000000	0.47	1.68
## 704	0.000000	0.99	1.16
## 705	0.000000	0.00	0.00
## 706	0.000000	0.00	0.00
## 707	0.000000	0.00	0.52
## 708	3.167822	3.90	1.18
## 709	0.000000	3.47	1.75
## 710	0.000000	1.49	0.31
## 711	0.000000	0.00	0.25
## 712	4.869783	4.50	0.38
## 713	4.851307	4.61	0.56
## 714	3.285415	2.95	0.34
## 715	0.000000	0.00	0.00
## 716	0.000000	0.00	0.00
## 717	0.000000	0.00	0.00
## 718	4.930550	3.79	2.12
## 719	4.942142	4.41	0.76
## 720	4.924841	4.79	0.67
## 721	0.000000	2.15	1.87
## 722	0.000000	4.10	1.76
## 723	0.000000	0.13	1.13
## 724	0.000000	0.00	0.00
## 725	4.861792	4.31	1.37
## 726	0.000000	0.93	0.94
## 727	4.885605	4.27	0.66
## 728	0.000000	1.09	0.77

## 729	4.911146	4.31	2.05
## 730	0.000000	0.00	0.00
## 731	0.000000	0.00	0.00
## 732	2.832326	4.64	0.70
## 733	4.912368	4.48	1.02
## 734	0.000000	0.00	0.00
## 735	4.878232	4.33	1.29
## 736	0.000000	3.00	0.81
## 737	0.000000	0.00	0.00
## 738	0.000000	5.27	0.15
## 739	0.000000	0.56	0.21
## 740	0.000000	2.03	0.33
## 741	0.000000	2.04	1.11
## 742	0.000000	0.00	0.00
## 743	0.000000	0.00	0.00
## 744	0.000000	3.17	1.22
## 745	0.000000	3.53	1.23
## 746	0.000000	7.64	0.45
## 747	0.000000	1.36	0.30
## 748	0.000000	2.87	0.97
## 749	0.000000	0.00	0.00
## 750	0.000000	0.00	0.00
## 751	0.000000	3.75	0.70
## 752	0.000000	4.16	0.77
## 753	0.000000	5.63	0.18
## 754	0.000000	2.79	1.64
## 755	0.000000	0.49	0.45
## 756	0.000000	3.12	1.04
## 757	0.000000	2.30	0.90
## 758	0.000000	3.48	0.66
## 759	0.000000	2.74	0.85
## 760	0.000000	5.28	0.12
## 761	0.000000	1.78	0.83
## 762	0.000000	3.82	1.43
## 763	0.000000	1.46	2.33
## 764	0.000000	2.31	1.53
## 765	0.000000	4.26	1.71
## 766	0.000000	7.11	1.20
## 767	0.000000	2.89	1.39
## 768	0.000000	0.38	0.27
## 769	0.000000	11.64	0.39
## 770	0.000000	10.43	0.47
## 771	0.000000	12.34	0.21
## 772	0.000000	13.26	0.39
## 773	0.000000	9.36	0.27
## 774	0.000000	9.24	0.80
## 775	0.000000	9.08	0.23
## 776	0.000000	9.22	0.31
## 777	0.000000	9.58	0.23
## 778	0.000000	9.67	0.25
## 779	0.000000	6.26	0.15
## 780	0.000000	12.54	0.63
## 781	0.000000	13.13	1.55
## 782	0.000000	11.37	0.46

## 783	0.000000	6.31	0.20
## 784	0.000000	6.46	0.43
## 785	0.000000	9.67	0.39
## 786	0.000000	6.17	0.31
## 787	0.000000	2.99	0.06
## 788	0.000000	0.00	0.00
## 789	0.000000	0.00	0.00
## 790	0.000000	8.39	0.93
## 791	0.000000	8.82	0.40
## 792	0.000000	8.85	0.45
## 793	0.000000	9.10	0.69
## 794	0.000000	12.44	0.88
## 795	0.000000	13.40	0.59
## 796	0.000000	6.12	0.57
## 797	0.000000	9.09	0.42
## 798	0.000000	6.08	0.28
## 799	0.000000	2.95	0.20
## 800	0.000000	5.43	0.14
## 801	0.000000	4.17	0.63
## 802	0.000000	1.93	0.99
## 803	0.000000	0.00	0.00
## 804	0.000000	0.43	3.27
## 805	0.000000	5.43	0.15
## 806	0.000000	1.04	0.63
## 807	0.000000	0.00	0.00
## 808	0.000000	0.33	0.82
## 809	0.000000	5.88	0.93
## 810	0.000000	0.00	0.00
## 811	0.000000	2.09	1.04
## 812	0.000000	5.60	0.19
## 813	0.000000	0.36	2.39
## 814	0.000000	1.18	0.49
## 815	0.000000	6.24	0.23
## 816	0.000000	0.67	0.78
## 817	0.000000	1.29	0.54
## 818	0.000000	0.00	0.00
## 819	2.253081	0.83	0.71
## 820	2.092147	4.96	0.65
## 821	2.253081	5.62	1.03
## 822	0.000000	4.91	1.15
## 823	0.000000	5.37	1.07
## 824	0.000000	0.00	0.00
## 825	2.092147	5.05	0.56
## 826	2.253081	5.30	0.88
## 827	2.092147	2.23	0.44
## 828	2.253081	6.90	0.82
## 829	2.092147	4.91	0.59
## 830	0.000000	1.52	0.52
## 831	0.000000	0.00	0.00
## 832	2.092147	5.05	0.87
## 833	0.000000	7.51	0.92
## 834	0.000000	0.33	0.18
## 835	0.000000	0.90	0.49
## 836	0.000000	0.25	0.36

## 837	0.000000	0.00	0.00
## 838	0.000000	6.03	0.56
## 839	2.092147	0.63	0.17
## 840	2.253081	1.34	1.06
## 841	0.000000	1.56	0.49
## 842	2.253081	0.89	0.16
## 843	2.092147	1.55	0.25
## 844	0.000000	0.00	0.00
## 845	0.000000	0.00	0.00
## 846	2.092147	1.27	0.66
## 847	2.253081	0.66	0.64
## 848	2.092147	1.39	0.59
## 849	0.000000	0.65	0.27
## 850	0.000000	0.00	0.33
## 851	0.000000	0.15	0.97
## 852	0.000000	0.00	0.00
## 853	0.000000	0.00	0.00
## 854	0.000000	0.00	0.00
## 855	0.000000	0.00	0.00
## 856	0.000000	0.31	1.06
## 857	0.000000	0.53	0.48
## 858	0.000000	0.00	1.04
## 859	0.000000	2.63	1.02
## 860	0.000000	0.29	2.41
## 861	0.000000	0.53	2.03
## 862	0.000000	0.15	2.05
## 863	0.000000	1.47	0.24
## 864	0.000000	0.07	4.22
## 865	0.000000	6.60	0.27
## 866	0.000000	0.00	1.20
## 867	0.000000	3.90	3.00
## 868	0.000000	0.15	1.28
## 869	0.000000	0.78	0.12
## 870	0.000000	0.00	0.00
## 871	0.000000	0.00	0.00
## 872	0.000000	0.00	0.00
## 873	0.000000	0.00	0.00
## 874	0.000000	0.14	1.19
## 875	0.000000	0.00	0.00
## 876	0.000000	0.22	3.31
## 877	0.000000	5.76	0.17
## 878	0.000000	0.69	2.01
## 879	0.000000	0.37	3.24
## 880	0.000000	0.00	0.00
## 881	0.000000	0.00	0.00
## 882	0.000000	0.00	0.00
## 883	0.000000	0.00	0.00
## 884	0.000000	0.00	0.00
## 885	0.000000	0.00	0.00
## 886	0.000000	0.00	0.00
## 887	0.000000	0.00	0.00
## 888	0.000000	0.00	0.00
## 889	0.000000	0.00	0.28
## 890	0.000000	0.00	0.00

## 891	0.000000	0.05	0.28
## 892	0.000000	0.16	0.44
## 893	0.000000	0.04	0.05
## 894	0.000000	0.00	0.00
## 895	0.000000	0.00	0.00
## 896	0.000000	0.00	0.00
## 897	0.000000	0.00	0.00
## 898	0.000000	0.14	0.28
## 899	0.000000	0.33	0.36
## 900	0.000000	0.00	0.00
## 901	0.000000	0.00	0.00
## 902	0.000000	0.00	0.00
## 903	0.000000	0.00	0.00
## 904	0.000000	0.00	0.00
## 905	0.000000	0.00	0.00
## 906	0.000000	0.00	0.00
## 907	0.000000	0.00	0.00
## 908	0.000000	0.00	0.00
## 909	0.000000	0.00	0.00
## 910	0.000000	12.22	0.34
## 911	0.000000	3.55	0.38
## 912	0.000000	10.55	0.59
## 913	0.000000	0.05	0.05
## 914	0.000000	13.24	1.21
## 915	0.000000	0.00	0.07
## 916	0.000000	2.44	0.27
## 917	0.000000	12.15	0.18
## 918	0.000000	11.02	0.69
## 919	0.000000	12.29	0.42
## 920	0.000000	10.23	0.03
## 921	0.000000	0.00	0.00
## 922	0.000000	11.01	0.01
## 923	0.000000	2.37	0.07
## 924	0.000000	1.76	0.13
## 925	0.000000	13.07	0.44
## 926	0.000000	4.93	0.38
## 927	0.000000	1.38	0.17
## 928	0.000000	21.66	0.08
## 929	0.000000	3.13	0.57
## 930	0.000000	0.00	0.00
## 931	0.000000	1.39	0.10
## 932	0.000000	10.42	0.31
## 933	0.000000	5.46	0.82
## 934	0.000000	12.79	0.29
## 935	0.000000	0.08	0.96
## 936	0.000000	1.08	0.20
## 937	0.000000	11.10	0.80
## 938	0.000000	1.35	0.46
## 939	0.000000	13.22	0.41
## 940	0.000000	1.82	0.04
##	light_active_distance	sedentary_active_distance	very_active_minutes
## 1	6.06	0.00	25
## 2	4.71	0.00	21
## 3	3.91	0.00	30

## 4	2.83	0.00	29
## 5	5.04	0.00	36
## 6	2.51	0.00	38
## 7	4.71	0.00	42
## 8	5.03	0.00	50
## 9	4.24	0.00	28
## 10	4.65	0.00	19
## 11	2.24	0.00	66
## 12	5.36	0.00	41
## 13	3.28	0.00	39
## 14	3.94	0.00	73
## 15	5.54	0.00	31
## 16	5.41	0.00	78
## 17	3.79	0.00	48
## 18	5.58	0.00	16
## 19	4.27	0.00	52
## 20	2.92	0.00	33
## 21	5.92	0.00	41
## 22	4.88	0.00	50
## 23	3.82	0.00	36
## 24	4.88	0.00	45
## 25	5.81	0.00	24
## 26	3.13	0.00	37
## 27	2.73	0.00	44
## 28	3.74	0.00	46
## 29	3.26	0.00	46
## 30	4.55	0.00	36
## 31	0.00	0.00	0
## 32	5.31	0.00	0
## 33	4.55	0.00	0
## 34	5.91	0.01	0
## 35	0.97	0.00	0
## 36	3.49	0.00	0
## 37	1.49	0.01	15
## 38	4.62	0.01	17
## 39	1.90	0.00	0
## 40	3.23	0.00	0
## 41	4.11	0.02	0
## 42	2.60	0.00	0
## 43	5.54	0.01	0
## 44	1.89	0.00	16
## 45	4.20	0.02	0
## 46	1.83	0.01	0
## 47	2.46	0.00	17
## 48	1.60	0.00	0
## 49	1.55	0.00	0
## 50	2.12	0.01	11
## 51	1.91	0.02	186
## 52	3.47	0.00	7
## 53	1.34	0.02	0
## 54	1.42	0.00	0
## 55	1.58	0.02	0
## 56	1.12	0.01	0
## 57	1.37	0.00	0

## 58	2.22	0.00	0
## 59	1.13	0.00	0
## 60	1.92	0.01	0
## 61	2.04	0.00	0
## 62	1.92	0.01	0
## 63	5.33	0.00	2
## 64	2.64	0.00	30
## 65	5.10	0.00	5
## 66	3.45	0.00	3
## 67	5.09	0.00	51
## 68	3.55	0.00	29
## 69	2.45	0.00	15
## 70	5.30	0.00	5
## 71	1.76	0.01	0
## 72	0.88	0.01	0
## 73	2.66	0.01	0
## 74	4.25	0.00	0
## 75	2.41	0.00	0
## 76	1.95	0.00	8
## 77	4.69	0.00	11
## 78	2.20	0.00	0
## 79	4.31	0.00	3
## 80	2.31	0.00	0
## 81	9.46	0.00	9
## 82	3.23	0.00	3
## 83	2.35	0.00	1
## 84	4.54	0.00	10
## 85	1.66	0.02	0
## 86	2.13	0.01	6
## 87	6.01	0.02	11
## 88	5.67	0.01	41
## 89	4.88	0.00	0
## 90	2.09	0.01	32
## 91	4.97	0.01	12
## 92	0.95	0.01	0
## 93	4.43	0.00	0
## 94	3.26	0.00	0
## 95	5.23	0.00	0
## 96	2.54	0.00	0
## 97	2.26	0.00	0
## 98	2.59	0.00	2
## 99	2.56	0.00	0
## 100	0.13	0.00	0
## 101	0.01	0.00	0
## 102	4.68	0.00	2
## 103	3.55	0.00	0
## 104	2.36	0.00	0
## 105	0.00	0.00	0
## 106	0.00	0.00	0
## 107	0.00	0.00	0
## 108	0.00	0.00	0
## 109	4.56	0.00	0
## 110	3.25	0.00	0
## 111	2.65	0.00	0

## 112	1.45	0.00	0
## 113	0.00	0.00	0
## 114	2.68	0.00	0
## 115	1.37	0.00	0
## 116	1.48	0.00	0
## 117	0.03	0.00	0
## 118	0.00	0.00	0
## 119	0.00	0.00	0
## 120	0.00	0.00	0
## 121	0.00	0.00	0
## 122	0.00	0.00	0
## 123	0.00	0.00	0
## 124	0.47	0.00	0
## 125	0.25	0.00	0
## 126	1.10	0.00	0
## 127	0.68	0.00	0
## 128	0.00	0.00	0
## 129	0.00	0.00	0
## 130	0.17	0.00	0
## 131	0.00	0.00	0
## 132	0.00	0.00	0
## 133	0.00	0.00	0
## 134	0.10	0.00	0
## 135	2.04	0.00	0
## 136	1.14	0.00	1
## 137	0.11	0.00	0
## 138	2.60	0.00	0
## 139	0.00	0.00	0
## 140	1.16	0.00	0
## 141	0.00	0.00	0
## 142	0.00	0.00	0
## 143	0.83	0.00	14
## 144	1.16	0.00	16
## 145	0.18	0.00	10
## 146	1.24	0.00	0
## 147	0.00	0.00	0
## 148	1.45	0.00	0
## 149	1.04	0.00	0
## 150	0.00	0.00	0
## 151	0.00	0.00	0
## 152	0.00	0.00	0
## 153	0.00	0.00	0
## 154	0.00	0.00	0
## 155	4.26	0.00	42
## 156	5.41	0.00	43
## 157	4.82	0.00	32
## 158	5.78	0.00	27
## 159	3.39	0.00	41
## 160	6.88	0.00	28
## 161	6.30	0.00	48
## 162	5.00	0.00	31
## 163	5.40	0.00	48
## 164	4.31	0.00	104
## 165	4.47	0.00	52

## 166	4.21	0.00	0
## 167	4.58	0.00	37
## 168	4.46	0.00	44
## 169	5.11	0.00	55
## 170	5.12	0.00	19
## 171	5.39	0.00	6
## 172	5.50	0.00	21
## 173	10.57	0.00	13
## 174	4.50	0.00	25
## 175	4.33	0.00	36
## 176	4.28	0.00	72
## 177	4.85	0.00	36
## 178	4.70	0.00	55
## 179	4.64	0.00	24
## 180	3.02	0.00	20
## 181	2.31	0.00	0
## 182	5.64	0.00	35
## 183	5.56	0.00	57
## 184	3.99	0.00	58
## 185	4.44	0.00	16
## 186	2.20	0.00	3
## 187	3.10	0.00	0
## 188	2.05	0.00	0
## 189	2.37	0.00	0
## 190	1.58	0.00	0
## 191	0.52	0.00	0
## 192	2.06	0.00	0
## 193	1.50	0.00	0
## 194	4.48	0.00	0
## 195	1.53	0.00	0
## 196	1.81	0.00	0
## 197	7.71	0.00	0
## 198	2.16	0.00	0
## 199	3.73	0.00	0
## 200	3.68	0.00	0
## 201	3.77	0.00	0
## 202	3.95	0.00	0
## 203	4.71	0.00	0
## 204	2.93	0.00	0
## 205	2.28	0.00	0
## 206	4.35	0.00	0
## 207	3.72	0.00	0
## 208	4.07	0.00	0
## 209	7.54	0.00	0
## 210	5.08	0.00	0
## 211	2.60	0.00	0
## 212	3.45	0.00	0
## 213	6.60	0.00	0
## 214	0.16	0.00	0
## 215	5.32	0.00	0
## 216	5.51	0.00	0
## 217	6.01	0.00	13
## 218	4.90	0.00	0
## 219	2.68	0.00	0

## 220	3.51	0.00	0
## 221	3.40	0.00	0
## 222	4.18	0.00	0
## 223	4.14	0.00	0
## 224	3.66	0.00	0
## 225	4.34	0.00	0
## 226	1.81	0.00	1
## 227	3.76	0.00	0
## 228	3.42	0.00	0
## 229	2.80	0.00	0
## 230	1.99	0.00	3
## 231	2.30	0.00	0
## 232	1.16	0.00	0
## 233	1.03	0.00	0
## 234	0.62	0.00	0
## 235	3.07	0.00	0
## 236	0.52	0.00	0
## 237	1.88	0.00	5
## 238	3.16	0.00	20
## 239	0.81	0.00	0
## 240	3.11	0.00	0
## 241	3.29	0.00	0
## 242	4.97	0.00	0
## 243	3.47	0.00	0
## 244	2.08	0.00	0
## 245	4.20	0.00	0
## 246	4.33	0.00	0
## 247	1.79	0.00	0
## 248	4.20	0.00	28
## 249	3.41	0.00	19
## 250	3.94	0.00	1
## 251	5.43	0.00	1
## 252	5.53	0.00	66
## 253	3.26	0.00	1
## 254	3.79	0.00	11
## 255	4.44	0.00	0
## 256	4.78	0.00	11
## 257	3.38	0.00	23
## 258	2.92	0.00	9
## 259	7.15	0.00	32
## 260	6.26	0.00	0
## 261	4.60	0.00	15
## 262	3.95	0.00	0
## 263	5.32	0.00	26
## 264	3.60	0.00	0
## 265	0.03	0.00	0
## 266	4.88	0.00	2
## 267	4.88	0.02	0
## 268	5.32	0.00	0
## 269	5.69	0.01	0
## 270	3.51	0.01	47
## 271	1.34	0.00	0
## 272	4.89	0.00	1
## 273	5.36	0.00	0

## 274	4.66	0.01	22
## 275	5.47	0.01	2
## 276	4.42	0.02	46
## 277	4.02	0.01	28
## 278	1.62	0.00	46
## 279	4.95	0.00	0
## 280	5.24	0.00	2
## 281	2.36	0.00	46
## 282	2.91	0.00	28
## 283	2.18	0.00	20
## 284	4.26	0.01	5
## 285	3.44	0.00	7
## 286	4.83	0.02	0
## 287	4.66	0.01	1
## 288	5.56	0.00	0
## 289	4.03	0.00	13
## 290	4.61	0.01	0
## 291	0.55	0.00	75
## 292	2.64	0.00	46
## 293	5.19	0.00	0
## 294	5.55	0.01	0
## 295	4.32	0.01	0
## 296	5.11	0.00	0
## 297	3.23	0.01	0
## 298	5.27	0.02	16
## 299	4.65	0.01	6
## 300	5.06	0.02	0
## 301	4.70	0.03	0
## 302	4.36	0.01	11
## 303	3.35	0.00	20
## 304	5.24	0.02	0
## 305	2.38	0.02	15
## 306	4.64	0.01	18
## 307	2.61	0.01	0
## 308	3.58	0.00	20
## 309	3.49	0.02	14
## 310	4.09	0.00	0
## 311	3.87	0.01	22
## 312	3.19	0.01	24
## 313	3.76	0.00	0
## 314	6.22	0.01	0
## 315	2.42	0.01	17
## 316	2.09	0.00	0
## 317	2.01	0.00	44
## 318	2.55	0.00	31
## 319	3.82	0.00	5
## 320	3.26	0.00	15
## 321	2.97	0.00	31
## 322	3.92	0.00	11
## 323	3.82	0.00	4
## 324	3.96	0.00	19
## 325	3.28	0.00	2
## 326	4.06	0.00	0
## 327	3.06	0.00	33

## 328	3.85	0.00	0
## 329	2.17	0.00	30
## 330	2.41	0.00	50
## 331	2.95	0.00	7
## 332	4.62	0.00	0
## 333	3.22	0.00	15
## 334	2.71	0.00	36
## 335	3.41	0.00	43
## 336	2.41	0.00	41
## 337	3.02	0.00	24
## 338	4.53	0.00	47
## 339	2.89	0.00	14
## 340	2.71	0.00	14
## 341	2.67	0.00	29
## 342	3.59	0.00	0
## 343	3.17	0.00	9
## 344	3.55	0.00	8
## 345	3.31	0.00	1
## 346	0.13	0.00	4
## 347	5.68	0.00	4
## 348	0.00	0.00	0
## 349	0.03	0.00	0
## 350	0.77	0.00	36
## 351	0.59	0.00	65
## 352	0.01	0.00	0
## 353	0.04	0.00	0
## 354	0.00	0.00	0
## 355	0.00	0.00	0
## 356	0.00	0.00	0
## 357	0.00	0.00	0
## 358	0.00	0.00	0
## 359	0.00	0.00	0
## 360	0.00	0.00	0
## 361	0.00	0.00	0
## 362	0.00	0.00	0
## 363	0.00	0.00	0
## 364	0.00	0.00	0
## 365	0.00	0.00	0
## 366	0.00	0.00	0
## 367	0.29	0.00	0
## 368	3.15	0.05	0
## 369	5.58	0.00	13
## 370	4.04	0.07	38
## 371	3.10	0.01	0
## 372	3.58	0.00	0
## 373	4.15	0.00	0
## 374	2.94	0.00	3
## 375	3.87	0.04	0
## 376	2.33	0.00	2
## 377	0.41	0.00	0
## 378	3.94	0.00	0
## 379	4.37	0.00	0
## 380	0.00	0.00	0
## 381	2.44	0.00	3

## 382	0.00	0.00	0
## 383	1.31	0.00	8
## 384	6.44	0.00	1
## 385	3.80	0.00	0
## 386	3.18	0.00	0
## 387	0.02	0.00	0
## 388	1.12	0.00	1
## 389	5.99	0.00	0
## 390	5.31	0.00	0
## 391	0.35	0.00	0
## 392	2.15	0.00	1
## 393	3.31	0.00	0
## 394	2.47	0.00	1
## 395	5.93	0.00	0
## 396	5.15	0.00	8
## 397	4.91	0.00	6
## 398	5.94	0.00	13
## 399	4.12	0.00	6
## 400	3.51	0.00	6
## 401	0.84	0.00	0
## 402	5.71	0.00	0
## 403	4.83	0.00	8
## 404	5.85	0.00	8
## 405	5.45	0.00	27
## 406	5.46	0.00	6
## 407	4.08	0.00	3
## 408	2.46	0.00	0
## 409	6.25	0.00	2
## 410	5.70	0.00	3
## 411	5.18	0.00	3
## 412	0.01	0.00	0
## 413	0.00	0.00	0
## 414	3.88	0.00	1
## 415	5.62	0.00	10
## 416	6.73	0.00	0
## 417	4.45	0.00	6
## 418	3.58	0.00	0
## 419	5.14	0.00	27
## 420	5.77	0.00	20
## 421	5.29	0.00	19
## 422	6.98	0.00	7
## 423	4.92	0.00	77
## 424	5.35	0.00	58
## 425	6.30	0.00	14
## 426	7.84	0.00	11
## 427	5.27	0.00	14
## 428	5.39	0.00	11
## 429	6.03	0.00	19
## 430	5.42	0.00	13
## 431	6.94	0.00	14
## 432	6.20	0.00	12
## 433	4.55	0.00	33
## 434	7.88	0.00	18
## 435	5.80	0.00	35

## 436	5.09	0.00	12
## 437	5.93	0.00	33
## 438	5.33	0.00	120
## 439	3.23	0.00	107
## 440	6.79	0.00	6
## 441	6.46	0.00	13
## 442	6.53	0.00	8
## 443	2.59	0.00	0
## 444	2.20	0.00	0
## 445	1.99	0.00	0
## 446	2.67	0.00	0
## 447	4.83	0.00	0
## 448	2.65	0.00	0
## 449	1.52	0.00	0
## 450	1.95	0.00	25
## 451	1.39	0.00	0
## 452	1.39	0.00	0
## 453	2.54	0.00	0
## 454	4.58	0.00	0
## 455	2.93	0.00	0
## 456	3.36	0.00	0
## 457	2.27	0.00	0
## 458	1.96	0.00	29
## 459	2.38	0.00	32
## 460	3.01	0.00	0
## 461	3.13	0.00	0
## 462	4.18	0.00	0
## 463	3.51	0.00	0
## 464	2.35	0.00	27
## 465	2.58	0.00	30
## 466	1.96	0.00	0
## 467	2.18	0.00	2
## 468	3.03	0.00	0
## 469	1.25	0.00	26
## 470	4.65	0.00	0
## 471	3.54	0.00	0
## 472	2.63	0.00	0
## 473	2.86	0.00	34
## 474	0.52	0.00	0
## 475	3.39	0.00	0
## 476	1.61	0.00	19
## 477	4.49	0.00	0
## 478	3.73	0.00	17
## 479	3.50	0.00	8
## 480	4.71	0.00	7
## 481	4.00	0.00	14
## 482	3.16	0.00	1
## 483	3.17	0.00	0
## 484	7.70	0.00	6
## 485	3.47	0.00	20
## 486	4.01	0.00	5
## 487	5.65	0.00	0
## 488	4.51	0.00	18
## 489	3.59	0.00	12

## 490	3.46	0.00	27
## 491	5.95	0.00	1
## 492	2.31	0.00	15
## 493	4.46	0.00	7
## 494	2.27	0.00	0
## 495	5.22	0.00	0
## 496	2.60	0.00	21
## 497	3.46	0.00	0
## 498	5.51	0.00	14
## 499	2.48	0.00	0
## 500	2.83	0.00	23
## 501	2.02	0.00	66
## 502	5.52	0.00	6
## 503	2.39	0.00	11
## 504	3.94	0.00	4
## 505	4.17	0.00	0
## 506	5.85	0.00	0
## 507	5.58	0.00	0
## 508	6.37	0.00	0
## 509	4.79	0.00	1
## 510	7.54	0.00	3
## 511	5.88	0.00	12
## 512	4.07	0.00	22
## 513	4.19	0.00	10
## 514	5.73	0.00	2
## 515	2.94	0.00	4
## 516	1.35	0.00	0
## 517	8.27	0.00	9
## 518	5.88	0.00	15
## 519	6.11	0.00	6
## 520	4.54	0.00	1
## 521	4.78	0.00	1
## 522	5.77	0.00	14
## 523	6.07	0.00	12
## 524	5.88	0.00	4
## 525	0.00	0.00	0
## 526	3.76	0.00	5
## 527	7.67	0.00	0
## 528	5.54	0.00	4
## 529	6.09	0.00	8
## 530	4.87	0.00	1
## 531	8.97	0.00	5
## 532	3.54	0.00	9
## 533	6.10	0.00	0
## 534	6.65	0.00	1
## 535	4.98	0.00	10
## 536	2.23	0.00	0
## 537	5.41	0.00	19
## 538	3.16	0.00	0
## 539	4.67	0.00	61
## 540	4.71	0.00	58
## 541	3.77	0.00	0
## 542	0.43	0.00	0
## 543	2.43	0.00	0

## 544	4.18	0.00	69
## 545	1.77	0.00	0
## 546	2.96	0.00	47
## 547	5.60	0.00	25
## 548	2.68	0.00	0
## 549	1.18	0.00	0
## 550	3.69	0.00	51
## 551	4.46	0.00	40
## 552	4.74	0.00	16
## 553	3.17	0.00	49
## 554	4.91	0.00	46
## 555	0.78	0.00	0
## 556	3.37	0.00	0
## 557	4.90	0.00	23
## 558	5.68	0.00	26
## 559	2.77	0.00	0
## 560	4.43	0.00	44
## 561	4.23	0.00	21
## 562	1.22	0.00	0
## 563	3.30	0.00	3
## 564	4.56	0.00	59
## 565	5.20	0.00	61
## 566	3.22	0.00	0
## 567	1.06	0.00	8
## 568	2.10	0.00	86
## 569	3.25	0.00	15
## 570	2.78	0.00	118
## 571	3.56	0.00	115
## 572	2.73	0.00	184
## 573	2.32	0.00	200
## 574	1.82	0.00	114
## 575	1.76	0.00	108
## 576	1.76	0.00	87
## 577	2.78	0.00	110
## 578	3.30	0.00	62
## 579	4.14	0.00	24
## 580	1.98	0.00	210
## 581	2.76	0.00	61
## 582	2.47	0.00	38
## 583	2.93	0.00	63
## 584	3.01	0.00	99
## 585	2.47	0.00	97
## 586	2.61	0.00	207
## 587	3.24	0.00	194
## 588	4.07	0.00	37
## 589	3.57	0.00	97
## 590	2.08	0.00	25
## 591	2.67	0.00	45
## 592	1.45	0.00	41
## 593	0.00	0.00	0
## 594	0.00	0.00	0
## 595	0.99	0.00	34
## 596	3.35	0.00	104
## 597	0.89	0.00	45

## 598	0.00	0.00	0
## 599	0.00	0.00	0
## 600	0.00	0.00	0
## 601	10.30	0.00	0
## 602	9.48	0.00	7
## 603	5.40	0.00	0
## 604	3.89	0.00	0
## 605	8.41	0.00	0
## 606	5.52	0.00	26
## 607	5.62	0.00	11
## 608	6.20	0.00	0
## 609	8.68	0.00	0
## 610	5.76	0.00	0
## 611	0.00	0.00	0
## 612	6.87	0.00	0
## 613	7.11	0.00	0
## 614	2.60	0.00	0
## 615	7.24	0.00	0
## 616	5.28	0.00	0
## 617	6.73	0.00	0
## 618	3.73	0.00	0
## 619	0.00	0.00	0
## 620	2.26	0.00	0
## 621	7.40	0.00	0
## 622	2.68	0.00	0
## 623	5.54	0.00	0
## 624	5.53	0.00	0
## 625	3.38	0.00	0
## 626	3.45	0.00	0
## 627	5.39	0.01	0
## 628	5.77	0.03	0
## 629	7.17	0.01	0
## 630	6.27	0.01	0
## 631	4.00	0.00	31
## 632	5.19	0.02	0
## 633	5.39	0.01	0
## 634	4.80	0.01	0
## 635	0.00	0.00	0
## 636	4.72	0.00	0
## 637	0.00	0.00	33
## 638	4.46	0.00	0
## 639	5.03	0.01	8
## 640	0.00	0.00	0
## 641	4.18	0.03	0
## 642	4.33	0.00	0
## 643	0.00	0.00	0
## 644	5.09	0.01	0
## 645	4.00	0.02	8
## 646	5.11	0.02	0
## 647	4.57	0.00	0
## 648	4.40	0.01	0
## 649	4.79	0.00	0
## 650	4.59	0.03	0
## 651	4.16	0.00	0

## 652	5.82	0.00	0
## 653	4.73	0.02	0
## 654	0.00	0.00	0
## 655	0.00	0.00	0
## 656	1.22	0.00	17
## 657	1.97	0.00	14
## 658	0.92	0.00	0
## 659	0.06	0.00	36
## 660	0.31	0.00	5
## 661	3.17	0.00	30
## 662	0.00	0.00	0
## 663	2.22	0.00	70
## 664	0.00	0.00	0
## 665	0.46	0.00	0
## 666	0.00	0.00	0
## 667	0.15	0.00	11
## 668	1.90	0.00	33
## 669	0.73	0.00	42
## 670	0.00	0.00	0
## 671	0.24	0.00	2
## 672	0.00	0.00	0
## 673	1.48	0.00	3
## 674	0.68	0.00	9
## 675	0.00	0.00	0
## 676	0.01	0.00	0
## 677	0.00	0.00	0
## 678	0.00	0.00	0
## 679	1.93	0.00	12
## 680	1.05	0.00	2
## 681	2.51	0.00	50
## 682	1.96	0.00	8
## 683	1.03	0.00	0
## 684	3.68	0.00	0
## 685	4.88	0.00	50
## 686	5.69	0.00	5
## 687	4.32	0.00	13
## 688	2.87	0.00	35
## 689	5.09	0.00	48
## 690	3.51	0.11	53
## 691	3.77	0.00	30
## 692	7.04	0.00	58
## 693	3.32	0.00	0
## 694	4.46	0.10	35
## 695	3.90	0.00	36
## 696	4.25	0.00	7
## 697	5.59	0.00	38
## 698	5.81	0.00	12
## 699	3.67	0.00	32
## 700	3.61	0.00	0
## 701	5.34	0.00	18
## 702	4.33	0.00	21
## 703	4.55	0.00	15
## 704	4.81	0.00	14
## 705	3.91	0.00	0

## 706	4.50	0.00	0
## 707	2.25	0.00	0
## 708	3.65	0.00	43
## 709	4.99	0.00	62
## 710	2.65	0.00	24
## 711	2.11	0.00	0
## 712	5.41	0.00	53
## 713	4.48	0.00	56
## 714	4.96	0.00	34
## 715	3.53	0.00	0
## 716	3.10	0.00	0
## 717	5.39	0.00	0
## 718	5.05	0.02	48
## 719	5.31	0.00	53
## 720	5.86	0.00	60
## 721	5.17	0.00	30
## 722	4.37	0.00	64
## 723	4.15	0.00	2
## 724	7.42	0.00	0
## 725	7.67	0.00	51
## 726	8.23	0.00	16
## 727	5.29	0.00	50
## 728	8.26	0.00	16
## 729	7.95	0.00	55
## 730	2.52	0.00	0
## 731	3.75	0.00	0
## 732	3.83	0.00	64
## 733	5.36	0.00	58
## 734	0.00	0.00	0
## 735	5.48	0.00	53
## 736	3.86	0.00	44
## 737	0.00	0.00	0
## 738	2.97	0.00	59
## 739	2.84	0.00	31
## 740	3.66	0.00	35
## 741	2.53	0.00	30
## 742	0.01	0.00	0
## 743	0.00	0.00	0
## 744	2.31	0.00	61
## 745	2.51	0.00	67
## 746	2.54	0.00	87
## 747	4.51	0.00	19
## 748	2.67	0.00	58
## 749	1.80	0.00	0
## 750	2.15	0.00	0
## 751	2.37	0.00	69
## 752	2.12	0.00	70
## 753	2.53	0.00	55
## 754	3.36	0.00	54
## 755	4.00	0.00	24
## 756	5.24	0.00	42
## 757	4.85	0.00	30
## 758	2.66	0.00	66
## 759	3.16	0.00	57

## 760	2.90	0.00	45
## 761	2.95	0.00	24
## 762	3.12	0.00	84
## 763	4.68	0.00	20
## 764	3.25	0.00	32
## 765	3.12	0.00	67
## 766	2.45	0.00	72
## 767	2.23	0.00	57
## 768	1.89	0.00	5
## 769	2.10	0.00	116
## 770	2.45	0.00	95
## 771	3.36	0.00	119
## 772	2.59	0.00	132
## 773	1.49	0.00	96
## 774	3.64	0.00	111
## 775	3.35	0.00	102
## 776	2.95	0.00	90
## 777	2.38	0.00	89
## 778	2.58	0.00	100
## 779	1.88	0.00	60
## 780	4.02	0.00	125
## 781	3.26	0.00	129
## 782	3.86	0.00	118
## 783	3.10	0.00	68
## 784	2.93	0.00	60
## 785	2.35	0.00	90
## 786	3.17	0.00	58
## 787	2.54	0.00	27
## 788	0.85	0.00	0
## 789	1.43	0.00	0
## 790	2.59	0.00	87
## 791	1.91	0.00	89
## 792	2.21	0.00	93
## 793	1.21	0.00	90
## 794	2.35	0.00	121
## 795	3.66	0.00	125
## 796	2.69	0.00	66
## 797	1.85	0.00	96
## 798	3.04	0.00	60
## 799	0.76	0.00	28
## 800	1.59	0.00	40
## 801	1.31	0.00	35
## 802	0.54	0.00	29
## 803	1.76	0.00	0
## 804	2.45	0.00	6
## 805	2.33	0.00	41
## 806	1.80	0.00	16
## 807	2.78	0.00	0
## 808	3.11	0.01	5
## 809	1.75	0.00	49
## 810	1.87	0.00	0
## 811	3.13	0.00	30
## 812	1.34	0.00	41
## 813	1.77	0.00	7

## 814	1.37	0.00	19
## 815	1.70	0.00	45
## 816	0.34	0.00	11
## 817	2.40	0.00	16
## 818	0.00	0.00	0
## 819	4.50	0.00	65
## 820	4.21	0.00	116
## 821	3.91	0.00	123
## 822	5.41	0.00	60
## 823	2.44	0.00	64
## 824	1.69	0.00	0
## 825	5.20	0.00	117
## 826	4.18	0.00	120
## 827	4.78	0.00	82
## 828	4.29	0.00	137
## 829	4.18	0.00	113
## 830	2.48	0.00	19
## 831	2.94	0.00	0
## 832	3.92	0.00	117
## 833	4.42	0.00	90
## 834	5.33	0.00	4
## 835	2.91	0.00	11
## 836	4.27	0.00	3
## 837	2.34	0.00	0
## 838	2.47	0.00	71
## 839	4.01	0.00	63
## 840	4.50	0.00	71
## 841	4.20	0.00	19
## 842	5.74	0.00	66
## 843	3.78	0.00	74
## 844	3.54	0.00	0
## 845	2.33	0.00	0
## 846	4.72	0.00	71
## 847	3.92	0.00	63
## 848	5.27	0.00	72
## 849	2.69	0.00	8
## 850	3.58	0.00	0
## 851	3.23	0.00	2
## 852	2.43	0.00	0
## 853	0.90	0.00	0
## 854	0.00	0.00	0
## 855	0.00	0.00	0
## 856	1.35	0.00	4
## 857	3.44	0.00	7
## 858	3.07	0.00	0
## 859	3.01	0.00	35
## 860	4.08	0.00	4
## 861	4.75	0.00	7
## 862	4.27	0.00	2
## 863	1.81	0.00	18
## 864	3.89	0.00	1
## 865	2.87	0.00	77
## 866	3.61	0.00	0
## 867	4.92	0.00	46

## 868	6.43	0.00	2
## 869	2.04	0.00	10
## 870	0.00	0.00	0
## 871	0.00	0.00	0
## 872	0.00	0.00	0
## 873	1.18	0.00	0
## 874	3.23	0.00	2
## 875	4.77	0.00	0
## 876	3.66	0.00	3
## 877	1.73	0.00	66
## 878	3.72	0.00	9
## 879	3.17	0.00	5
## 880	0.00	0.00	0
## 881	1.64	0.00	0
## 882	0.84	0.00	0
## 883	0.78	0.00	0
## 884	1.59	0.00	0
## 885	0.16	0.00	0
## 886	0.00	0.00	0
## 887	0.00	0.00	0
## 888	0.00	0.00	0
## 889	1.74	0.00	0
## 890	0.09	0.00	0
## 891	2.27	0.00	1
## 892	2.75	0.00	8
## 893	0.16	0.00	3
## 894	0.00	0.00	0
## 895	0.85	0.00	0
## 896	1.13	0.00	0
## 897	3.94	0.00	0
## 898	4.93	0.00	6
## 899	3.91	0.00	10
## 900	1.04	0.00	0
## 901	1.17	0.00	0
## 902	1.55	0.00	0
## 903	1.46	0.00	0
## 904	0.00	0.00	0
## 905	0.00	0.00	0
## 906	0.00	0.00	0
## 907	0.00	0.00	0
## 908	0.00	0.00	0
## 909	0.00	0.00	0
## 910	7.82	0.00	85
## 911	5.64	0.00	108
## 912	7.75	0.02	68
## 913	7.01	0.01	106
## 914	10.71	0.00	94
## 915	8.79	0.00	58
## 916	5.94	0.00	29
## 917	5.03	0.00	82
## 918	6.34	0.00	73
## 919	4.89	0.00	82
## 920	5.97	0.05	61
## 921	7.40	0.01	102

## 922	4.69	0.00	64	
## 923	6.27	0.01	113	
## 924	6.50	0.00	22	
## 925	7.10	0.00	93	
## 926	5.97	0.00	58	
## 927	5.79	0.00	18	
## 928	4.93	0.00	124	
## 929	4.57	0.00	36	
## 930	3.56	0.00	0	
## 931	6.67	0.01	19	
## 932	5.53	0.00	66	
## 933	4.37	0.00	67	
## 934	6.16	0.00	96	
## 935	6.99	0.00	105	
## 936	6.80	0.00	17	
## 937	6.24	0.05	73	
## 938	6.28	0.00	18	
## 939	5.89	0.00	88	
## 940	4.25	0.00	23	
<hr/>				
##	fairly_active_minutes	lightly_active_minutes	sedentary_minutes	calories
## 1	13	328	728	1985
## 2	19	217	776	1797
## 3	11	181	1218	1776
## 4	34	209	726	1745
## 5	10	221	773	1863
## 6	20	164	539	1728
## 7	16	233	1149	1921
## 8	31	264	775	2035
## 9	12	205	818	1786
## 10	8	211	838	1775
## 11	27	130	1217	1827
## 12	21	262	732	1949
## 13	5	238	709	1788
## 14	14	216	814	2013
## 15	23	279	833	1970
## 16	11	243	1108	2159
## 17	28	189	782	1898
## 18	12	243	815	1837
## 19	34	217	712	1947
## 20	35	246	730	1820
## 21	15	277	798	2004
## 22	24	254	816	1990
## 23	22	203	1179	1819
## 24	24	250	857	1959
## 25	6	289	754	1896
## 26	46	175	833	1821
## 27	8	203	574	1740
## 28	11	206	835	1819
## 29	31	214	746	1859
## 30	23	251	669	1783
## 31	0	0	1440	0
## 32	0	146	1294	1432
## 33	0	148	1292	1411
## 34	0	236	1204	1572

## 35	0	96	1344	1344
## 36	0	176	1264	1463
## 37	22	127	1276	1554
## 38	7	202	1214	1604
## 39	0	141	1299	1435
## 40	0	151	1289	1446
## 41	0	186	1254	1467
## 42	0	199	1241	1470
## 43	0	227	1213	1562
## 44	18	185	1221	1617
## 45	0	202	1238	1492
## 46	0	140	1300	1402
## 47	36	154	1233	1670
## 48	5	115	1320	1401
## 49	0	150	1290	1404
## 50	23	224	1182	1655
## 51	63	171	1020	2690
## 52	6	166	1261	1497
## 53	0	96	1344	1334
## 54	0	118	1322	1368
## 55	0	117	1323	1370
## 56	0	102	1338	1341
## 57	0	182	1258	1474
## 58	0	152	1288	1427
## 59	0	91	1349	1328
## 60	0	139	1301	1393
## 61	0	112	1328	1359
## 62	0	107	890	1002
## 63	51	256	1131	3199
## 64	16	135	1259	2902
## 65	58	252	1125	3226
## 66	4	170	1263	2750
## 67	42	212	1135	3493
## 68	13	186	1212	3011
## 69	33	121	1271	2806
## 70	58	278	1099	3300
## 71	0	125	1315	2430
## 72	0	38	1402	2140
## 73	0	86	1354	2344
## 74	15	160	1265	2677
## 75	0	89	1351	2413
## 76	1	94	1337	2497
## 77	41	223	1165	3123
## 78	0	118	1322	2489
## 79	53	227	1157	3108
## 80	0	120	1193	2498
## 81	71	402	816	3846
## 82	24	146	908	2696
## 83	7	148	682	2580
## 84	94	221	1115	3324
## 85	0	52	1388	2222
## 86	12	81	1341	2463
## 87	6	369	1054	3328
## 88	17	243	1139	3404

## 89	0	295	991	2987
## 90	6	303	1099	3008
## 91	19	155	1254	2799
## 92	0	49	713	1276
## 93	0	339	1101	2030
## 94	0	248	1192	1860
## 95	0	373	843	2130
## 96	0	176	527	1725
## 97	0	147	1293	1657
## 98	8	199	1231	1793
## 99	12	217	1211	1814
## 100	0	10	1430	1366
## 101	0	1	1439	1349
## 102	13	308	1117	2062
## 103	0	220	1220	1827
## 104	0	139	1301	1645
## 105	0	0	1440	1347
## 106	0	0	1440	1347
## 107	0	0	1440	1347
## 108	0	1	1439	1348
## 109	0	302	1138	1992
## 110	0	247	1082	1856
## 111	0	184	218	1763
## 112	7	75	585	1541
## 113	0	0	1440	1348
## 114	0	184	1256	1742
## 115	0	87	1353	1549
## 116	0	120	1320	1589
## 117	0	2	1438	1351
## 118	0	0	1440	1347
## 119	0	0	1440	1347
## 120	0	0	1440	1347
## 121	0	0	1440	1347
## 122	0	0	1440	1347
## 123	0	0	711	665
## 124	0	55	734	2220
## 125	0	32	986	2151
## 126	9	88	1292	2383
## 127	0	51	941	2221
## 128	0	0	1440	2064
## 129	0	0	1440	2063
## 130	0	17	1423	2111
## 131	0	0	1440	2063
## 132	0	0	1440	2063
## 133	0	0	1440	2064
## 134	0	10	1430	2093
## 135	0	145	1295	2499
## 136	6	75	1358	2324
## 137	0	12	1303	2100
## 138	0	192	1058	2638
## 139	0	0	1440	2063
## 140	0	95	1167	2351
## 141	0	0	1440	2063
## 142	0	0	1440	2064

## 143	1	70	1355	2411
## 144	8	94	1322	2505
## 145	0	17	1413	2195
## 146	0	87	1353	2338
## 147	0	0	1440	2063
## 148	0	108	1332	2383
## 149	0	48	1392	2229
## 150	0	0	1440	2063
## 151	0	0	1440	2063
## 152	0	0	1440	2063
## 153	0	0	1440	2063
## 154	0	0	966	1383
## 155	14	227	1157	2390
## 156	5	292	1100	2601
## 157	3	257	1148	2312
## 158	9	282	1122	2525
## 159	11	151	1237	2177
## 160	29	331	1052	2782
## 161	3	311	1078	2770
## 162	7	250	1152	2489
## 163	63	276	1053	2897
## 164	53	255	1028	3158
## 165	10	273	1105	2638
## 166	0	249	1191	2069
## 167	26	216	1161	2529
## 168	8	217	1171	2470
## 169	24	275	1086	2793
## 170	20	282	1119	2463
## 171	20	291	1123	2296
## 172	40	281	1098	2611
## 173	23	361	1043	2732
## 174	28	245	1142	2380
## 175	8	277	1119	2473
## 176	14	250	1104	2752
## 177	27	272	1105	2649
## 178	20	253	1112	2609
## 179	17	295	1104	2498
## 180	2	149	1269	1995
## 181	0	135	1305	1848
## 182	47	297	1061	2709
## 183	28	271	1084	2797
## 184	25	224	1133	2544
## 185	16	236	728	1853
## 186	8	181	706	1459
## 187	0	238	663	1521
## 188	0	197	653	1431
## 189	0	188	687	1444
## 190	0	150	728	1373
## 191	0	60	1053	1214
## 192	0	182	1062	1419
## 193	0	141	785	1356
## 194	0	327	623	1667
## 195	0	153	749	1370
## 196	0	162	712	1399

## 197	0	432	458	1916
## 198	0	164	704	1401
## 199	0	260	821	1576
## 200	0	288	1018	1595
## 201	0	286	586	1593
## 202	0	331	626	1649
## 203	0	352	492	1692
## 204	0	233	594	1506
## 205	0	191	716	1447
## 206	0	355	716	1690
## 207	0	304	981	1604
## 208	0	345	530	1658
## 209	0	475	479	1926
## 210	0	383	511	1736
## 211	0	229	665	1491
## 212	0	258	610	1555
## 213	0	401	543	1869
## 214	0	17	1002	1141
## 215	0	330	569	1698
## 216	0	343	330	1364
## 217	9	306	1112	2124
## 218	0	335	1105	2003
## 219	0	191	1249	1696
## 220	0	245	1195	1801
## 221	0	195	1245	1724
## 222	0	249	1191	1852
## 223	7	260	1173	1905
## 224	11	228	1201	1811
## 225	11	283	1146	1922
## 226	10	127	1302	1610
## 227	0	266	1174	1851
## 228	0	242	1129	1804
## 229	0	204	1236	1725
## 230	5	152	1280	1654
## 231	0	147	1293	1632
## 232	0	82	1358	1481
## 233	0	76	1364	1473
## 234	0	45	1395	1410
## 235	0	234	1206	1779
## 236	0	40	1400	1403
## 237	6	123	1306	1613
## 238	10	206	1204	1878
## 239	0	52	1388	1426
## 240	11	223	1206	1780
## 241	0	204	1236	1742
## 242	0	319	1121	1972
## 243	0	247	1193	1821
## 244	0	145	1295	1630
## 245	0	290	1150	1899
## 246	0	300	1140	1903
## 247	0	128	830	1125
## 248	13	320	964	2344
## 249	32	195	676	2038
## 250	48	206	705	2010

## 251	24	284	720	2133
## 252	72	268	968	2670
## 253	7	249	508	1882
## 254	16	206	678	1944
## 255	7	382	648	2346
## 256	43	269	1011	2198
## 257	26	208	761	2048
## 258	27	206	781	1946
## 259	35	360	591	2629
## 260	0	360	584	2187
## 261	11	277	653	2095
## 262	0	227	732	1861
## 263	9	295	623	2194
## 264	0	229	764	1854
## 265	0	4	2	403
## 266	21	356	1061	1982
## 267	8	404	1028	2004
## 268	0	331	1109	1893
## 269	0	448	992	2063
## 270	1	305	1087	2148
## 271	8	160	1272	1529
## 272	6	311	1122	1890
## 273	0	389	1051	1956
## 274	5	378	1035	2094
## 275	10	371	1057	1970
## 276	0	366	1028	2241
## 277	5	330	1077	2021
## 278	1	190	1203	1898
## 279	0	359	1081	1907
## 280	5	309	1124	1882
## 281	0	197	1197	1966
## 282	7	213	1192	1835
## 283	23	206	1191	1780
## 284	20	248	1167	1830
## 285	18	196	1219	1739
## 286	7	334	1099	1878
## 287	6	363	1070	1906
## 288	0	420	1020	2015
## 289	23	311	1093	1971
## 290	5	370	1065	1910
## 291	11	52	1302	1897
## 292	0	326	1068	2096
## 293	0	345	1095	1906
## 294	0	373	1067	1962
## 295	0	319	1121	1826
## 296	0	268	720	1431
## 297	0	280	1160	1788
## 298	8	371	1045	2093
## 299	25	370	1039	2065
## 300	0	335	1105	1908
## 301	0	356	1084	1908
## 302	2	322	1105	1964
## 303	7	343	1070	2014
## 304	0	376	1064	1985

## 305	3	274	1148	1867
## 306	9	376	1037	2124
## 307	0	206	1234	1669
## 308	2	303	1115	1995
## 309	7	292	1127	1921
## 310	0	416	1024	2010
## 311	2	333	1083	2057
## 312	13	346	1057	2095
## 313	0	385	1055	1972
## 314	0	402	1038	2044
## 315	4	300	1119	1946
## 316	0	172	842	1237
## 317	19	131	777	1450
## 318	46	153	754	1495
## 319	23	214	801	1433
## 320	42	183	644	1468
## 321	83	153	663	1625
## 322	58	205	600	1529
## 323	95	214	605	1584
## 324	67	221	738	1638
## 325	98	164	845	1554
## 326	0	242	712	1397
## 327	12	188	731	1481
## 328	92	252	724	1638
## 329	95	129	660	1655
## 330	9	133	781	1570
## 331	95	170	797	1551
## 332	10	176	714	1377
## 333	8	190	804	1407
## 334	32	150	744	1545
## 335	52	194	687	1650
## 336	40	124	691	1501
## 337	143	176	713	1760
## 338	41	258	594	1710
## 339	96	142	852	1628
## 340	88	178	680	1618
## 341	55	168	676	1590
## 342	86	208	703	1574
## 343	116	171	688	1633
## 344	122	151	1159	1667
## 345	115	196	676	1630
## 346	0	9	13	52
## 347	15	331	712	3654
## 348	0	0	1440	1981
## 349	0	3	1437	2011
## 350	18	87	1299	2951
## 351	21	55	1222	3051
## 352	0	2	1438	1990
## 353	0	2	1438	1995
## 354	0	0	1440	1980
## 355	0	0	1440	1980
## 356	0	0	1440	1980
## 357	0	0	1440	1980
## 358	0	0	1440	1980

## 359	0	0	1440	1980
## 360	0	0	1440	1980
## 361	0	0	1440	1980
## 362	0	0	1440	1980
## 363	0	0	1440	1980
## 364	0	0	1440	1980
## 365	0	0	1440	1980
## 366	0	0	1440	1980
## 367	11	31	1350	2207
## 368	0	174	950	2828
## 369	46	346	531	3879
## 370	42	196	916	3429
## 371	0	177	855	2704
## 372	0	184	1256	2975
## 373	0	263	775	3089
## 374	5	173	1225	2785
## 375	0	206	774	2926
## 376	8	134	1296	2645
## 377	0	21	721	1120
## 378	0	164	1276	2286
## 379	0	160	1280	2306
## 380	0	0	1440	1776
## 381	6	88	873	1527
## 382	0	0	1440	2115
## 383	15	96	1234	2135
## 384	9	339	589	2302
## 385	0	228	752	1985
## 386	0	194	724	1884
## 387	0	3	1363	1464
## 388	9	58	824	1632
## 389	0	311	604	2200
## 390	18	306	671	2220
## 391	0	34	1265	1792
## 392	19	176	709	1886
## 393	0	233	546	1945
## 394	5	191	692	1880
## 395	8	390	544	2314
## 396	21	288	649	2236
## 397	47	300	680	2324
## 398	8	359	552	2367
## 399	18	289	624	2175
## 400	38	196	695	2092
## 401	0	67	836	1593
## 402	11	344	585	2270
## 403	26	287	669	2235
## 404	13	313	1106	2282
## 405	34	328	957	2530
## 406	11	314	692	2266
## 407	28	279	586	2158
## 408	0	153	603	1792
## 409	14	374	490	2345
## 410	12	329	555	2260
## 411	18	311	574	2232
## 412	0	2	0	257

## 413	0	0	1440	2955
## 414	14	150	1275	3092
## 415	35	219	945	2998
## 416	0	299	837	3066
## 417	9	253	609	3073
## 418	0	201	721	2572
## 419	8	239	1017	3274
## 420	16	249	704	3015
## 421	42	228	696	3083
## 422	12	272	853	3069
## 423	25	220	945	3544
## 424	5	215	749	3306
## 425	8	239	584	2885
## 426	31	301	1054	3288
## 427	23	224	673	2929
## 428	48	241	684	3074
## 429	9	234	878	2969
## 430	16	236	1175	2979
## 431	43	300	537	3283
## 432	15	241	579	2926
## 433	4	204	935	3147
## 434	18	306	984	3290
## 435	21	251	632	3162
## 436	39	199	896	2899
## 437	45	262	1100	3425
## 438	56	260	508	4022
## 439	38	178	576	3934
## 440	19	258	1020	3013
## 441	14	267	648	3061
## 442	18	256	858	2954
## 443	0	108	825	1623
## 444	0	196	787	2113
## 445	0	194	840	2095
## 446	0	231	717	2194
## 447	0	350	711	2496
## 448	0	225	716	2180
## 449	0	114	1219	1933
## 450	6	162	1247	2248
## 451	0	121	895	1954
## 452	0	137	841	1974
## 453	0	215	756	2150
## 454	0	317	706	2432
## 455	0	201	1239	2149
## 456	0	244	1196	2247
## 457	0	179	916	2070
## 458	1	180	839	2291
## 459	1	194	839	2361
## 460	0	236	762	2203
## 461	0	226	1106	2196
## 462	0	290	797	2363
## 463	0	240	741	2246
## 464	4	200	667	2336
## 465	2	233	725	2421
## 466	0	180	897	2070

## 845	0	139	621	2685
## 846	13	171	772	3721
## 847	13	152	840	3586
## 848	10	184	763	3788
## 849	6	102	433	1976
## 850	7	196	1237	2650
## 851	23	163	1252	2654
## 852	0	134	1306	2443
## 853	0	65	1375	2505
## 854	0	0	1440	2693
## 855	0	0	1440	2439
## 856	22	105	1309	2536
## 857	10	166	1257	2668
## 858	27	167	1246	2647
## 859	18	158	1229	2883
## 860	54	212	1170	2944
## 861	44	238	1151	3012
## 862	44	206	1188	2889
## 863	6	122	1294	2547
## 864	91	214	1134	3093
## 865	5	129	1229	3142
## 866	28	203	1209	2757
## 867	67	258	1069	3513
## 868	28	317	1093	3164
## 869	2	117	1311	2596
## 870	0	0	1440	2894
## 871	0	0	1440	3212
## 872	0	0	1440	2516
## 873	0	70	1370	3266
## 874	22	166	1250	2683
## 875	0	250	1190	2810
## 876	72	182	1183	2940
## 877	4	110	1260	2947
## 878	43	162	1226	2846
## 879	71	177	1106	2804
## 880	0	0	1440	0
## 881	0	116	831	2044
## 882	0	82	806	1934
## 883	0	84	853	1963
## 884	0	126	937	2009
## 885	0	12	1428	1721
## 886	0	0	1440	1688
## 887	0	0	1440	1688
## 888	0	0	1440	1688
## 889	10	139	744	2188
## 890	0	9	1431	1720
## 891	20	195	817	2419
## 892	45	232	795	2748
## 893	8	19	1410	1799
## 894	0	0	1440	1688
## 895	0	80	1360	1928
## 896	0	112	900	2067
## 897	0	310	714	2780
## 898	14	380	634	3101

```

## 899      20      301      749      2896
## 900      0       79       834      1962
## 901      0       101      916      2015
## 902      0       156      739      2297
## 903      0       129      848      2067
## 904      0        0      1440      1688
## 905      0        0      1440      1688
## 906      0        0      1440      1688
## 907      0        0      1440      1688
## 908      0        0      1440      1688
## 909      0        0        48       57
## 910      7       312      1036     3921
## 911     18       216      1098     3566
## 912     13       298      1061     3793
## 913      1       281      1052     3934
## 914     29       429      888      4547
## 915     15       307      1060     3545
## 916      5       191      1215     2761
## 917     13       214      1131     3676
## 918     19       225      1123     3679
## 919     13       226      1119     3659
## 920      2       236      1141     3427
## 921      6       300      1032     3891
## 922      1       227      1148     3455
## 923      8       218      1101     3802
## 924      3       258      1157     2860
## 925      8       235      1104     3808
## 926      8       231      1143     3060
## 927      5       210      1207     2698
## 928      4       223      1089     4398
## 929     12       166      1226     2786
## 930      0       105      1335     2189
## 931      3       229      1189     2817
## 932      8       212      1154     3477
## 933     15       188      1170     3052
## 934     17       232      1095     4015
## 935     28       271      1036     4142
## 936      4       245      1174     2847
## 937     19       217      1131     3710
## 938     11       224      1187     2832
## 939     12       213      1127     3832
## 940      1       137      770      1849

```

```
skim_without_charts(activity)
```

Table 1: Data summary

Name	activity
Number of rows	940
Number of columns	15
Column type frequency:	
character	1
numeric	14

Group variables	None
-----------------	------

Variable type: character

skim_variable	n_missing	complete_rate	min	max	empty	n_unique	whitespace
ActivityDate	0	1	8	9	0	31	0

Variable type: numeric

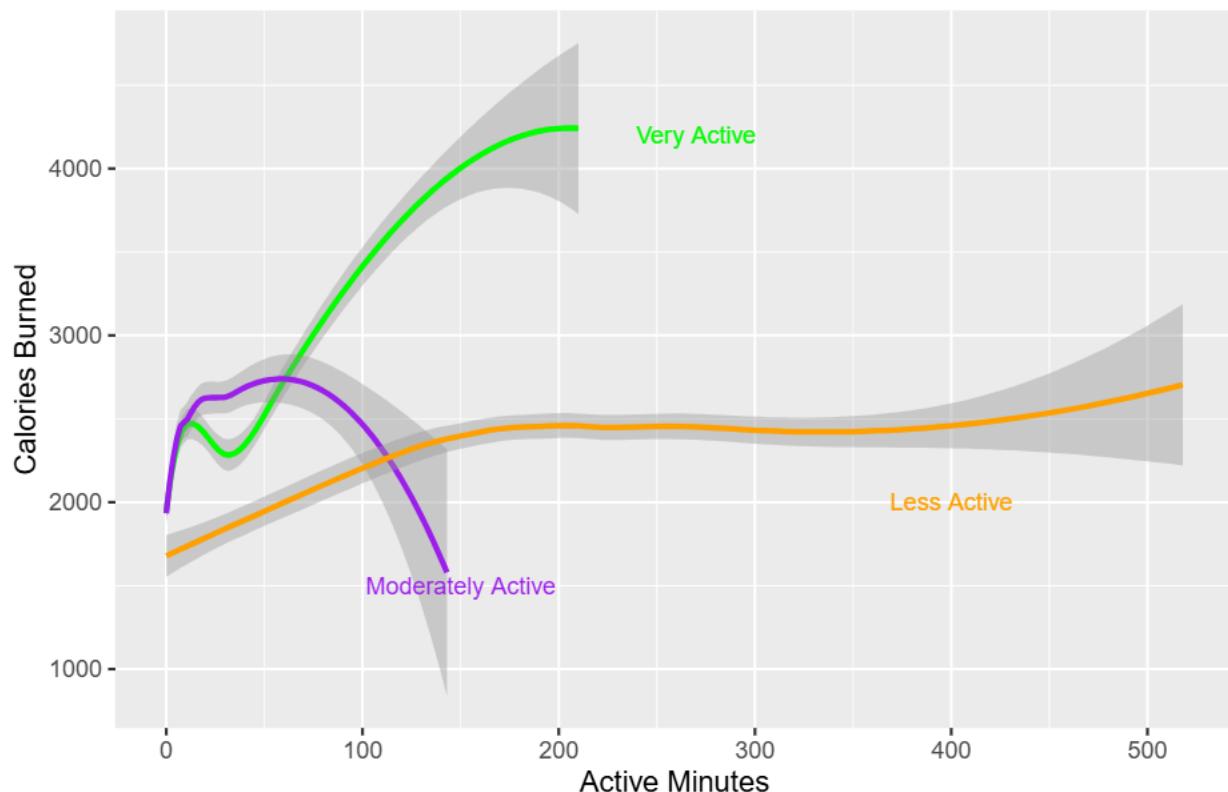
skim_variable	n_missing	complete_rate	mean	sd	p0	p25	p50	p75	p100
Id	0	1	4.855407e+20	2.24805e+10	3.96036320127e+09	4.5115e+09	6.2181e+08	9.77689e+09	
TotalSteps	0	1	7.637910e+50	8.7150e+03	0	3.789750e+50	5.500e+50	7.2700e+50	1.900e+04
TotalDistance	0	1	5.490000e+30	9.20000e+00	0	2.620000e+30	4.00000e+30	7.010000e+30	1.300e+01
TrackerDistance	0	1	5.480000e+30	9.10000e+00	0	2.620000e+30	4.00000e+30	7.010000e+30	1.300e+01
LoggedActivitiesDistance	0	1	1.100000e-6	2.00000e-01	0	0.000000e+00	0.000000e+00	0.000000e+00	4.000000e+00
VeryActiveDistance	0	1	1.500000e+20	6.00000e+00	0	0.000000e+20	0.000000e-2	5.00000e+20	9.2000e+01
ModeratelyActiveDistance	0	1	5.700000e-8	8.00000e-01	0	0.000000e+20	0.000000e-8	0.000000e-6	4.800000e+00
LightActiveDistance	0	1	3.340000e+20	4.00000e+00	0	1.950000e+30	6.00000e+40	7.80000e+100	7.1000e+01
SedentaryActiveDistance	0	1	0.000000e+00	0.000000e-02	0	0.000000e+00	0.000000e+00	0.000000e+00	1.000000e-01
VeryActiveMinutes	0	1	2.116000e+30	2.84000e+01	0	0.000000e+40	0.000000e+30	0.000000e+20	1.000000e+02
FairlyActiveMinutes	0	1	1.356000e+10	9.90000e+01	0	0.000000e+60	0.000000e+10	0.000000e+04	3.000000e+02
LightlyActiveMinutes	0	1	1.928100e+10	9.1700e+02	0	1.270000e+10	2.90000e+20	4.00000e+10	2.800000e+02
SedentaryMinutes	0	1	9.912100e+10	1.2700e+02	0	7.297500e+10	5.7500e+10	3.29500e+10	4.000000e+03
Calories	0	1	2.303610e+70	3.81700e+02	0	1.828500e+20	3.4000e+20	9.3250e+20	9.000000e+03

Analyze the activity dataset to find the trends

```
ggplot(data = activity)+geom_smooth(mapping = aes(x = VeryActiveMinutes, y= Calories), color = "green")+
  geom_smooth(mapping = aes(x = FairlyActiveMinutes, y= Calories), color = "purple") +
  geom_smooth(mapping = aes(x = LightlyActiveMinutes, y= Calories), color = "orange")+
  labs(title="Nature of Active Minutes vs. Calories Burned", x= "Active Minutes", y = "Calories Burned")+
  annotate("text", x=270, y=4200, label = "Very Active", color = "green", size = 3)+
  annotate("text", x=150, y=1500, label="Moderately Active", color = "purple", size = 3)+
  annotate("text", x=400, y=2000, label="Less Active", color = "orange", size = 3)

## `geom_smooth()` using method = 'loess' and formula = 'y ~ x'
## `geom_smooth()` using method = 'loess' and formula = 'y ~ x'
## `geom_smooth()` using method = 'loess' and formula = 'y ~ x'
```

Nature of Active Minutes vs. Calories Burned



From the above plot, we can see that being very active burns calories quicker. Using this, we can add a feature in the fitness tracker to encourage the customers to be more active like a reward system.

Next,

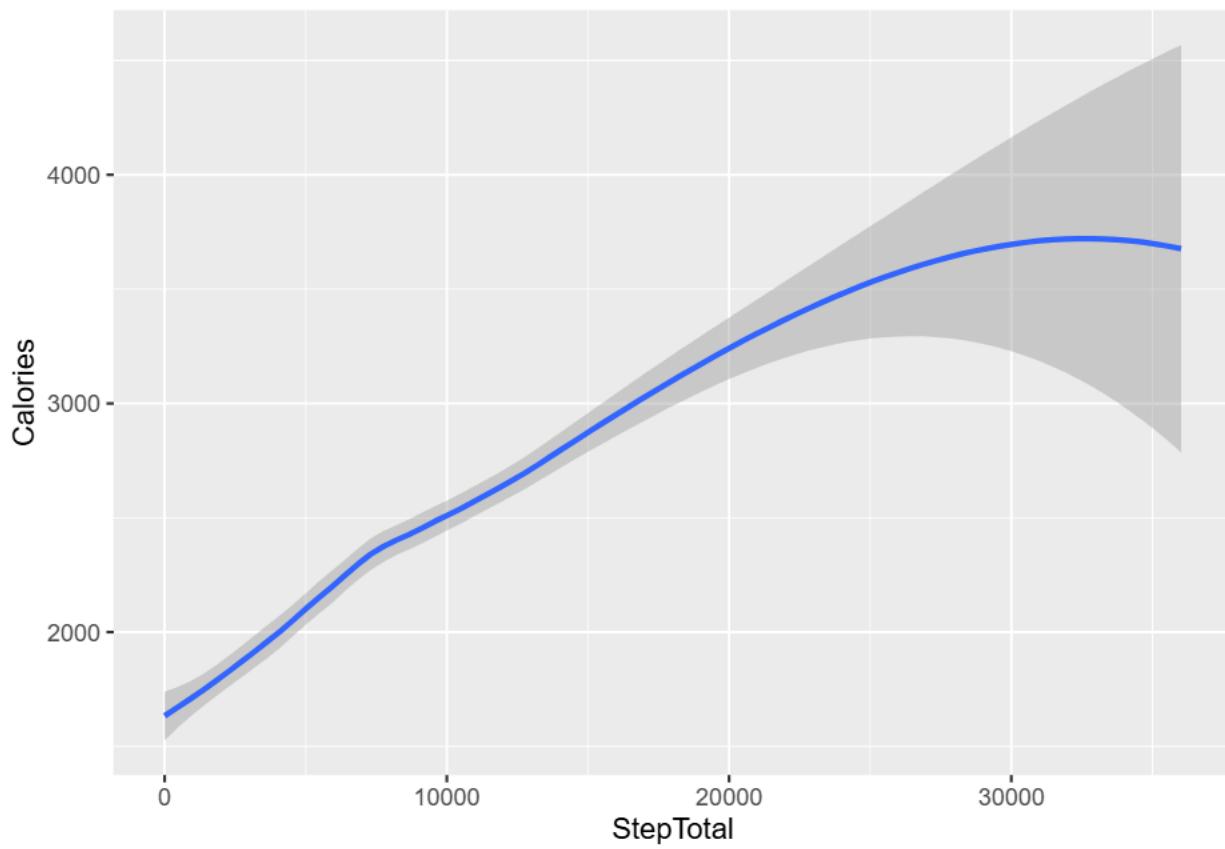
Lets combine the steps and calories dataset and analyze it. To do that, we first need to merge the steps and calories dataset

```
steps_cal_merged <- merge(steps, calories)
```

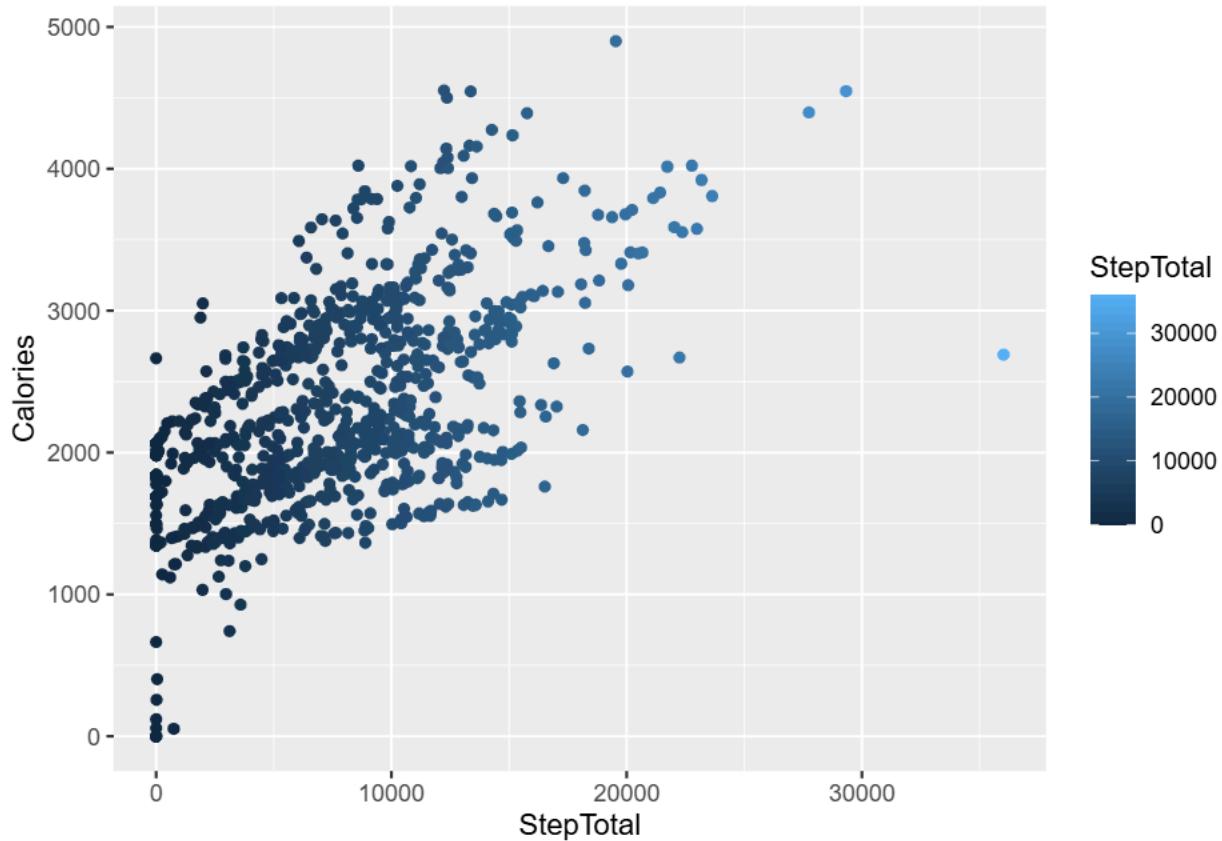
Then, create a plot with steps in the x-axis and calories in the y-axis:

```
ggplot(data=steps_cal_merged)+geom_smooth(mapping = aes(x=StepTotal, y=Calories, color = StepTotal))

## `geom_smooth()` using method = 'loess' and formula = 'y ~ x'
## Warning: The following aesthetics were dropped during statistical transformation:
## colour.
## i This can happen when ggplot fails to infer the correct grouping structure in
##   the data.
## i Did you forget to specify a `group` aesthetic or to convert a numerical
##   variable into a factor?
```



```
ggplot(data=steps_cal_merged)+geom_point(mapping = aes(x=StepTotal, y=Calories, color = StepTotal))
```



In the first plot, we used a geom_smooth line to clearly show the variation. But we found one interesting thing while using the geom_point() plot where it shows that the majority of the participants walked less than 15000 steps a day.

Also, we can conclude that more steps the participant walks, more calories they burn. Using this trend, we can add a feature where the customers get reminders to complete a set goal of steps within a time period, say 1000 steps every hour.

Next,

Let's check the summary of activity and sleep and see how they correlate

```
sleep_new <- separate(sleep, col = SleepDay, into = c("ActivityDate", "Time"), sep = " ")
## Warning: Expected 2 pieces. Additional pieces discarded in 413 rows [1, 2, 3, 4, 5, 6,
## 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, ...].
activity %>%
  select(TotalSteps,
         TotalDistance,
         SedentaryMinutes, Calories) %>%
  summary()

##      TotalSteps    TotalDistance   SedentaryMinutes     Calories
##  Min.    : 0       Min.    : 0.000   Min.    : 0.0       Min.    : 0
##  1st Qu.: 3790   1st Qu.: 2.620   1st Qu.: 729.8     1st Qu.: 1828
##  Median : 7406   Median : 5.245   Median :1057.5     Median : 2134
##  Mean   : 7638   Mean   : 5.490   Mean   : 991.2     Mean   : 2304
##  3rd Qu.:10727   3rd Qu.: 7.713   3rd Qu.:1229.5     3rd Qu.: 2793
```

```

##  Max.    :36019   Max.    :28.030   Max.    :1440.0   Max.    :4900
sleep_new %>%
  select (TotalSleepRecords,
          TotalMinutesAsleep,
          TotalTimeInBed) %>%
  summary()

```

```

##  TotalSleepRecords TotalMinutesAsleep TotalTimeInBed
##  Min.    :1.000    Min.    : 58.0      Min.    : 61.0
##  1st Qu.:1.000    1st Qu.:361.0     1st Qu.:403.0
##  Median  :1.000    Median  :433.0     Median  :463.0
##  Mean    :1.119    Mean    :419.5     Mean    :458.6
##  3rd Qu.:1.000    3rd Qu.:490.0     3rd Qu.:526.0
##  Max.    :3.000    Max.    :796.0     Max.    :961.0

```

From the activity summary, we see that the average total steps is 7638. A reward system like earning points towards a gift card can be introduced every time the customer reaches 10000 steps to motivate them to walk more steps.

From the sleep summary, we see that the average sleep is less than 7 hours. Research shows that a human requires minimum of 8 hours of sleep to be healthy and productive.

Another interesting relation from the sleep dataset is that, the more time a person spends in bed, the more time he sleeps. A feature to remind the bedtime can be added to enhance more sleep.

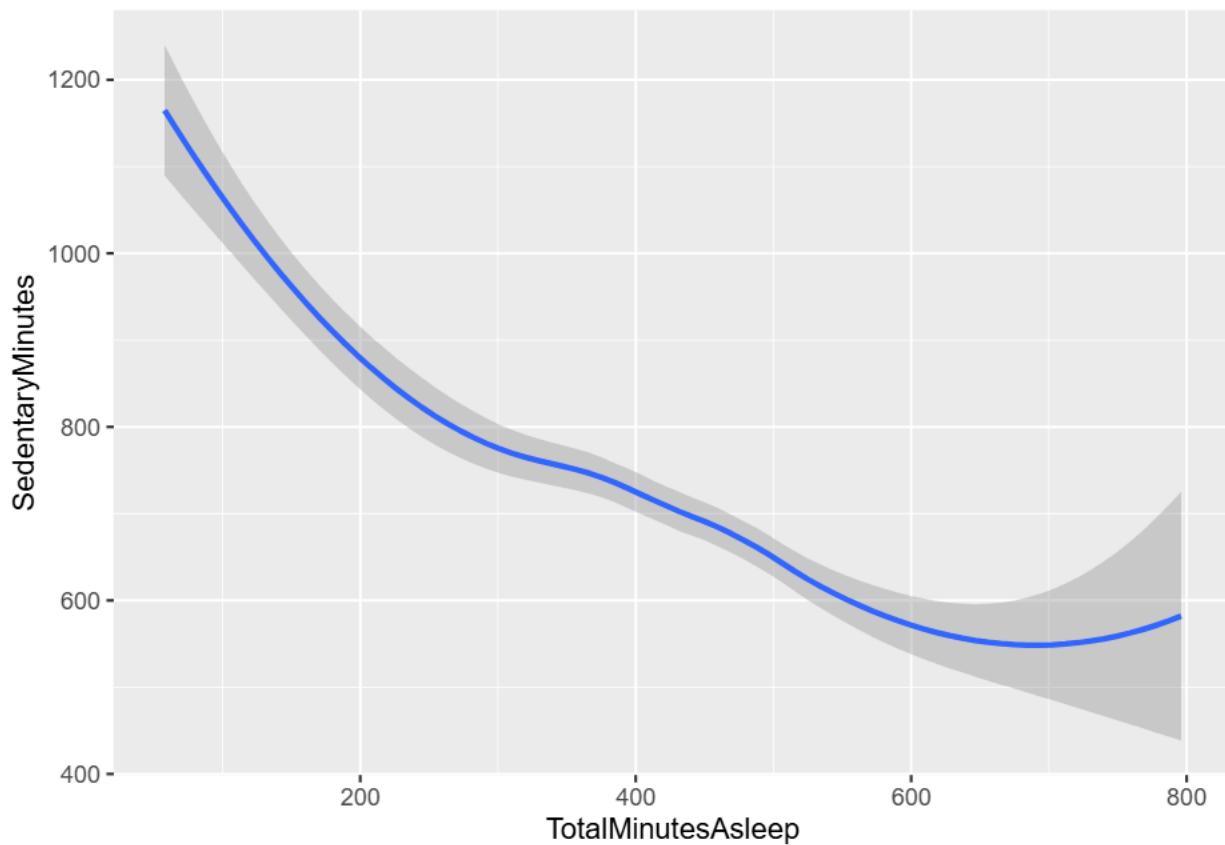
Now, let's merge the activity and sleep data sets to see the correlation using a plot

```

sleep_activity <- merge(activity, sleep_new)
ggplot(data = sleep_activity)+geom_smooth(mapping = aes(x=TotalMinutesAsleep, y = SedentaryMinutes))

## `geom_smooth()` using method = 'loess' and formula = 'y ~ x'

```



From this graph, we can clearly see that more sedentary minutes causes lack of sleep which can be very unhealthy. To avoid this, a feature can be added to reduce the sedentary minutes.

Step 5: Conclusion

Based on the analysis, we found the following:

1. A trend that more active minutes, burns calories faster.
2. More steps burns more calories.
3. The average sleep hour of a participant is 7 hours.
4. The more time a participant spends in bed, the more time he sleeps.
5. Lesser the sedentary minutes, more the sleep a participant gets.

Based on the analysis, the following features can be added in the Bellabeat fitness device:

1. **A scheduled bedtime reminder to remind the customer atleast an hour before the bedtime starts so they will have time to wind up the day and go to bed early resulting in better and longer sleep.**
2. **A reward system like earning points towards a gift card every time the customer completes 10000 steps.**
3. **A motivation system like a local community link to keep them motivated to produce more active minutes consistently.**

All the above features can be marketed as helping a customer developing healthy habits to stay a long and healthy life.