

Pearson's product-moment correlation

```
data: Intel and Pfizer
t = 0.5353, df = 62, p-value = 0.5944
alternative hypothesis: true correlation is not equal to 0
95 percent confidence interval:
 -0.1810004  0.3084926
sample estimates:
      cor
0.06782663

> x<-Mileage<-c(0,4,8,12,16,20,24,28,32)
> y<-Groove_Depth<-c(394.33,329.50,291.00,255.17,229.33,204.83
+ ,179.00,163.83,150.33)
> p1<-plot(x,y)
> mod<-lm(y~x)
> mod
```

```
Call:
lm(formula = y ~ x)
```

```
Coefficients:
(Intercept)          x
   360.637        -7.281
```

```
> abline(mod)
Error in int_abline(a = a, b = b, h = h, v = v, untf = untf, ...) :
  plot.new has not been called yet
> p1<-plot(x,y)
> abline(mod)
> anova(mod)
Analysis of Variance Table
```

```
Response: y
      Df Sum Sq Mean Sq F value    Pr(>F)
x       1  50887   50887  140.71 6.871e-06 ***
Residuals 7   2532     362
---
```

```
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

```
> plot(mod)
Hit <Return> to see next plot:
Hit <Return> to see next plot:
Hit <Return> to see next plot:
Hit <Return> to see next plot:
> par(mfrow=c(2,2))
> #this code let R show the plots in 2*2 format#
> plot(mod)
> summary(mod)
```

```
Call:
```

```
lm(formula = y ~ x)
```

```
Residuals:
```

```
      Min       1Q   Median       3Q      Max
-18.099 -11.392  -6.902   7.051  33.693
```

```
Coefficients:
```

```
              Estimate Std. Error t value Pr(>|t|)
(Intercept) 360.6367    11.6886   30.85 9.70e-09 ***
x           -7.2806     0.6138  -11.86 6.87e-06 ***
```

```
---
```

```
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

```
Residual standard error: 19.02 on 7 degrees of freedom
```

```
Multiple R-squared:  0.9526,    Adjusted R-squared:  0.9458
```

```
F-statistic: 140.7 on 1 and 7 DF,  p-value: 6.871e-06
```

```
> x
```

```
[1]  0  4  8 12 16 20 24 28 32
```

```
> y
```

```
[1] 394.33 329.50 291.00 255.17 229.33 204.83 179.00 163.83 150.33
```

```
> cor(x,y)
```

```
[1] -0.9760173
```

```
> p1<-plot(x,y)
```

```
> cor.test(x,y)
```

Pearson's product-moment correlation

data: x and y

t = -11.862, df = 7, p-value = 6.871e-06

alternative hypothesis: true correlation is not equal to 0

95 percent confidence interval:

-0.9951127 -0.8865562

sample estimates:

cor

-0.9760173

```
> read.csv("~/Desktop/Galton.csv")
```

	Family	Father	Mother	Gender	Height	Kids
1	1	78.5	67.0	M	73.2	4
2	1	78.5	67.0	F	69.2	4
3	1	78.5	67.0	F	69.0	4
4	1	78.5	67.0	F	69.0	4
5	2	75.5	66.5	M	73.5	4
6	2	75.5	66.5	M	72.5	4
7	2	75.5	66.5	F	65.5	4
8	2	75.5	66.5	F	65.5	4
9	3	75.0	64.0	M	71.0	2
10	3	75.0	64.0	F	68.0	2
11	4	75.0	64.0	M	70.5	5

12	4	75.0	64.0	M	68.5	5
13	4	75.0	64.0	F	67.0	5
14	4	75.0	64.0	F	64.5	5
15	4	75.0	64.0	F	63.0	5
16	5	75.0	58.5	M	72.0	6
17	5	75.0	58.5	M	69.0	6
18	5	75.0	58.5	M	68.0	6
19	5	75.0	58.5	F	66.5	6
20	5	75.0	58.5	F	62.5	6
21	5	75.0	58.5	F	62.5	6
22	6	74.0	68.0	F	69.5	1
23	7	74.0	68.0	M	76.5	6
24	7	74.0	68.0	M	74.0	6
25	7	74.0	68.0	M	73.0	6
26	7	74.0	68.0	M	73.0	6
27	7	74.0	68.0	F	70.5	6
28	7	74.0	68.0	F	64.0	6
29	8	74.0	66.5	F	70.5	3
30	8	74.0	66.5	F	68.0	3
31	8	74.0	66.5	F	66.0	3
32	9	74.5	66.0	F	66.0	1
33	10	74.0	65.5	F	65.5	1
34	11	74.0	62.0	M	74.0	8
35	11	74.0	62.0	M	70.0	8
36	11	74.0	62.0	F	68.0	8
37	11	74.0	62.0	F	67.0	8
38	11	74.0	62.0	F	67.0	8
39	11	74.0	62.0	F	66.0	8
40	11	74.0	62.0	F	63.5	8
41	11	74.0	62.0	F	63.0	8
42	12	74.0	61.0	F	65.0	1
43	14	73.0	67.0	M	68.0	2
44	14	73.0	67.0	M	67.0	2
45	15	73.0	66.5	M	71.0	3
46	15	73.0	66.5	M	70.5	3
47	15	73.0	66.5	F	66.7	3
48	16	73.0	65.0	M	72.0	9
49	16	73.0	65.0	M	70.5	9
50	16	73.0	65.0	M	70.2	9
51	16	73.0	65.0	M	70.2	9
52	16	73.0	65.0	M	69.2	9
53	16	73.0	65.0	F	68.7	9
54	16	73.0	65.0	F	66.5	9
55	16	73.0	65.0	F	64.5	9
56	16	73.0	65.0	F	63.5	9
57	17	73.0	64.5	M	74.0	6
58	17	73.0	64.5	M	73.0	6
59	17	73.0	64.5	M	71.5	6
60	17	73.0	64.5	M	62.5	6
61	17	73.0	64.5	F	66.5	6

62	17	73.0	64.5	F	62.3	6
63	18	73.0	64.0	F	66.0	3
64	18	73.0	64.0	F	64.5	3
65	18	73.0	64.0	F	64.0	3
66	19	73.2	63.0	F	62.7	1
67	20	72.7	69.0	M	73.2	8
68	20	72.7	69.0	M	73.0	8
69	20	72.7	69.0	M	72.7	8
70	20	72.7	69.0	F	70.0	8
71	20	72.7	69.0	F	69.0	8
72	20	72.7	69.0	F	68.5	8
73	20	72.7	69.0	F	68.0	8
74	20	72.7	69.0	F	66.0	8
75	21	72.0	68.0	M	73.0	3
76	21	72.0	68.0	F	68.5	3
77	21	72.0	68.0	F	68.0	3
78	22	72.0	67.0	M	73.0	3
79	22	72.0	67.0	M	71.0	3
80	22	72.0	67.0	F	67.0	3
81	23	72.0	65.0	M	74.2	7
82	23	72.0	65.0	M	70.5	7
83	23	72.0	65.0	M	69.5	7
84	23	72.0	65.0	F	66.0	7
85	23	72.0	65.0	F	65.5	7
86	23	72.0	65.0	F	65.0	7
87	23	72.0	65.0	F	65.0	7
88	24	72.0	65.5	F	65.5	1
89	25	72.0	64.0	F	66.0	2
90	25	72.0	64.0	F	63.0	2
91	26	72.0	63.0	M	70.5	5
92	26	72.0	63.0	M	70.5	5
93	26	72.0	63.0	M	69.0	5
94	26	72.0	63.0	F	65.0	5
95	26	72.0	63.0	F	63.0	5
96	27	72.0	63.0	M	69.0	3
97	27	72.0	63.0	M	67.0	3
98	27	72.0	63.0	F	63.0	3
99	28	72.0	63.0	M	73.0	6
100	28	72.0	63.0	M	67.0	6
101	28	72.0	63.0	F	70.5	6
102	28	72.0	63.0	F	70.0	6
103	28	72.0	63.0	F	66.5	6
104	28	72.0	63.0	F	63.0	6
105	29	72.5	63.5	F	67.5	3
106	29	72.5	63.5	F	67.2	3
107	29	72.5	63.5	F	66.7	3
108	30	72.0	62.0	F	64.0	1
109	31	72.5	62.0	M	71.0	6
110	31	72.5	62.0	M	70.0	6
111	31	72.5	62.0	M	70.0	6

112	31	72.5	62.0	F	66.0	6
113	31	72.5	62.0	F	65.0	6
114	31	72.5	62.0	F	65.0	6
115	32	72.0	62.0	M	74.0	5
116	32	72.0	62.0	M	72.0	5
117	32	72.0	62.0	M	69.0	5
118	32	72.0	62.0	F	67.5	5
119	32	72.0	62.0	F	63.5	5
120	33	72.0	62.0	M	72.0	5
121	33	72.0	62.0	M	71.5	5
122	33	72.0	62.0	M	71.5	5
123	33	72.0	62.0	M	70.0	5
124	33	72.0	62.0	F	68.0	5
125	34	72.0	61.0	F	65.7	1
126	35	71.0	69.0	M	78.0	5
127	35	71.0	69.0	M	74.0	5
128	35	71.0	69.0	M	73.0	5
129	35	71.0	69.0	M	72.0	5
130	35	71.0	69.0	F	67.0	5
131	36	71.0	67.0	M	73.2	4
132	36	71.0	67.0	M	73.0	4
133	36	71.0	67.0	M	69.0	4
134	36	71.0	67.0	F	67.0	4
135	37	71.0	66.0	M	70.0	4
136	37	71.0	66.0	F	67.0	4
137	37	71.0	66.0	F	67.0	4
138	37	71.0	66.0	F	66.5	4
139	38	71.0	66.0	M	70.0	6
140	38	71.0	66.0	M	69.0	6
141	38	71.0	66.0	M	68.5	6
142	38	71.0	66.0	F	66.0	6
143	38	71.0	66.0	F	64.5	6
144	38	71.0	66.0	F	63.0	6
145	39	71.0	66.0	M	71.0	2
146	39	71.0	66.0	F	67.0	2
147	40	71.0	66.0	M	76.0	5
148	40	71.0	66.0	M	72.0	5
149	40	71.0	66.0	M	71.0	5
150	40	71.0	66.0	M	66.0	5
151	40	71.0	66.0	F	66.0	5
152	41	71.7	65.5	M	70.5	1
153	42	71.0	65.5	M	72.0	6
154	42	71.0	65.5	M	72.0	6
155	42	71.0	65.5	M	71.0	6
156	42	71.0	65.5	M	69.0	6
157	42	71.0	65.5	F	66.0	6
158	42	71.0	65.5	F	65.0	6
159	43	71.5	65.5	M	73.0	2
160	43	71.5	65.5	F	65.2	2
161	44	71.5	65.0	M	68.5	2

162	44	71.5	65.0	M	67.7	2
163	45	71.0	65.0	M	68.0	3
164	45	71.0	65.0	M	68.0	3
165	45	71.0	65.0	F	62.0	3
166	46	71.0	64.0	F	68.0	8
167	46	71.0	64.0	F	68.0	8
168	46	71.0	64.0	F	67.5	8
169	46	71.0	64.0	F	66.5	8
170	46	71.0	64.0	F	66.5	8
171	46	71.0	64.0	F	66.0	8
172	46	71.0	64.0	F	65.5	8
173	46	71.0	64.0	F	65.0	8
174	47	71.7	64.5	M	72.0	4
175	47	71.7	64.5	M	71.0	4
176	47	71.7	64.5	M	70.5	4
177	47	71.7	64.5	F	67.0	4
178	48	71.0	64.0	M	68.0	3
179	48	71.0	64.0	M	68.0	3
180	48	71.0	64.0	M	68.0	3
181	49	71.5	64.5	M	72.0	7
182	49	71.5	64.5	M	71.0	7
183	49	71.5	64.5	M	70.0	7
184	49	71.5	64.5	F	66.0	7
185	49	71.5	64.5	F	64.5	7
186	49	71.5	64.5	F	64.5	7
187	49	71.5	64.5	F	62.0	7
188	51	71.2	63.0	F	67.5	2
189	51	71.2	63.0	F	64.5	2
190	52	71.0	63.5	M	71.0	5
191	52	71.0	63.5	M	67.0	5
192	52	71.0	63.5	F	66.0	5
193	52	71.0	63.5	F	65.0	5
194	52	71.0	63.5	F	63.5	5
195	53	71.0	63.0	M	71.0	9
196	53	71.0	63.0	M	70.0	9
197	53	71.0	63.0	M	70.0	9
198	53	71.0	63.0	M	64.0	9
199	53	71.0	63.0	F	65.0	9
200	53	71.0	63.0	F	65.0	9
201	53	71.0	63.0	F	64.0	9
202	53	71.0	63.0	F	63.0	9
203	53	71.0	63.0	F	63.0	9
204	54	71.0	63.0	M	71.0	4
205	54	71.0	63.0	M	71.0	4
206	54	71.0	63.0	M	70.0	4
207	54	71.0	63.0	F	63.5	4
208	55	71.0	62.0	M	71.0	5
209	55	71.0	62.0	M	70.0	5
210	55	71.0	62.0	F	64.5	5
211	55	71.0	62.0	F	62.5	5

212	55	71.0	62.0	F	61.5	5
213	56	71.0	62.0	M	72.0	5
214	56	71.0	62.0	M	70.5	5
215	56	71.0	62.0	M	70.5	5
216	56	71.0	62.0	F	64.5	5
217	56	71.0	62.0	F	60.0	5
218	57	71.0	62.5	M	70.0	5
219	57	71.0	62.5	F	64.0	5
220	57	71.0	62.5	F	64.0	5
221	57	71.0	62.5	F	64.0	5
222	57	71.0	62.5	F	62.5	5
223	58	71.0	62.0	M	70.5	7
224	58	71.0	62.0	M	70.0	7
225	58	71.0	62.0	M	69.0	7
226	58	71.0	62.0	M	69.0	7
227	58	71.0	62.0	M	66.0	7
228	58	71.0	62.0	F	64.5	7
229	58	71.0	62.0	F	64.0	7
230	59	71.0	61.0	F	62.0	1
231	60	71.0	58.0	M	71.5	2
232	60	71.0	58.0	M	69.0	2
233	61	70.0	69.0	M	71.0	4
234	61	70.0	69.0	M	70.0	4
235	61	70.0	69.0	M	69.0	4
236	61	70.0	69.0	F	69.0	4
237	62	70.0	69.0	M	70.0	6
238	62	70.0	69.0	M	68.7	6
239	62	70.0	69.0	F	68.0	6
240	62	70.0	69.0	F	66.0	6
241	62	70.0	69.0	F	64.0	6
242	62	70.0	69.0	F	62.0	6
243	63	70.0	68.0	M	75.0	1
244	64	70.0	67.0	M	70.0	5
245	64	70.0	67.0	M	69.0	5
246	64	70.0	67.0	F	66.0	5
247	64	70.0	67.0	F	64.0	5
248	64	70.0	67.0	F	60.0	5
249	65	70.0	67.0	F	67.5	1
250	66	70.0	66.5	M	73.0	11
251	66	70.0	66.5	M	72.0	11
252	66	70.0	66.5	M	72.0	11
253	66	70.0	66.5	M	66.5	11
254	66	70.0	66.5	F	69.2	11
255	66	70.0	66.5	F	67.2	11
256	66	70.0	66.5	F	66.5	11
257	66	70.0	66.5	F	66.0	11
258	66	70.0	66.5	F	66.0	11
259	66	70.0	66.5	F	64.2	11
260	66	70.0	66.5	F	63.7	11
261	67	70.5	65.0	M	72.0	4

262	67	70.5	65.0	M	70.2	4
263	67	70.5	65.0	M	69.0	4
264	67	70.5	65.0	M	68.5	4
265	68	70.5	65.0	F	68.0	5
266	68	70.5	65.0	F	65.0	5
267	68	70.5	65.0	F	61.5	5
268	68	70.5	65.0	F	61.0	5
269	68	70.5	65.0	F	61.0	5
270	69	70.0	65.0	M	73.0	8
271	69	70.0	65.0	M	72.0	8
272	69	70.0	65.0	M	70.5	8
273	69	70.0	65.0	M	65.0	8
274	69	70.0	65.0	M	65.0	8
275	69	70.0	65.0	F	64.5	8
276	69	70.0	65.0	F	63.0	8
277	69	70.0	65.0	F	62.0	8
278	70	70.0	65.0	M	67.0	5
279	70	70.0	65.0	M	65.0	5
280	70	70.0	65.0	F	64.5	5
281	70	70.0	65.0	F	62.5	5
282	70	70.0	65.0	F	62.5	5
283	71	70.0	65.0	M	70.0	6
284	71	70.0	65.0	M	70.0	6
285	71	70.0	65.0	F	67.0	6
286	71	70.0	65.0	F	65.0	6
287	71	70.0	65.0	F	65.0	6
288	71	70.0	65.0	F	63.0	6
289	72	70.0	65.0	M	79.0	7
290	72	70.0	65.0	M	75.0	7
291	72	70.0	65.0	M	71.0	7
292	72	70.0	65.0	F	69.0	7
293	72	70.0	65.0	F	67.0	7
294	72	70.0	65.0	F	65.7	7
295	72	70.0	65.0	F	62.0	7
296	73	70.0	65.0	M	73.0	3
297	73	70.0	65.0	M	72.5	3
298	73	70.0	65.0	F	65.0	3
299	74	70.0	65.0	M	69.0	2
300	74	70.0	65.0	M	69.0	2
301	75	70.0	64.7	M	72.0	7
302	75	70.0	64.7	M	70.0	7
303	75	70.0	64.7	M	68.7	7
304	75	70.0	64.7	F	66.5	7
305	75	70.0	64.7	F	65.5	7
306	75	70.0	64.7	F	64.7	7
307	75	70.0	64.7	F	64.5	7
308	76	70.0	64.0	M	70.7	7
309	76	70.0	64.0	M	70.0	7
310	76	70.0	64.0	M	68.0	7
311	76	70.0	64.0	M	67.0	7

312	76	70.0	64.0	M	66.0	7
313	76	70.0	64.0	M	65.0	7
314	76	70.0	64.0	F	67.0	7
315	77	70.0	64.0	M	70.0	4
316	77	70.0	64.0	M	68.0	4
317	77	70.0	64.0	M	66.7	4
318	77	70.0	64.0	F	65.5	4
319	78	70.0	64.2	M	72.0	5
320	78	70.0	64.2	M	70.0	5
321	78	70.0	64.2	F	62.5	5
322	78	70.0	64.2	F	61.2	5
323	78	70.0	64.2	F	60.1	5
324	79	70.5	64.0	M	74.0	8
325	79	70.5	64.0	M	69.5	8
326	79	70.5	64.0	M	69.0	8
327	79	70.5	64.0	M	68.0	8
328	79	70.5	64.0	M	68.0	8
329	79	70.5	64.0	M	68.0	8
330	79	70.5	64.0	F	65.5	8
331	79	70.5	64.0	F	65.0	8
332	80	70.5	64.5	F	60.0	1
333	81	70.0	64.0	M	68.0	4
334	81	70.0	64.0	F	65.0	4
335	81	70.0	64.0	F	64.0	4
336	81	70.0	64.0	F	62.0	4
337	82	70.0	64.0	M	71.0	9
338	82	70.0	64.0	M	70.0	9
339	82	70.0	64.0	M	70.0	9
340	82	70.0	64.0	M	70.0	9
341	82	70.0	64.0	M	69.5	9
342	82	70.0	64.0	M	68.5	9
343	82	70.0	64.0	F	69.0	9
344	82	70.0	64.0	F	65.0	9
345	82	70.0	64.0	F	64.0	9
346	83	70.0	63.7	M	70.0	8
347	83	70.0	63.7	M	67.0	8
348	83	70.0	63.7	M	65.5	8
349	83	70.0	63.7	F	63.7	8
350	83	70.0	63.7	F	63.2	8
351	83	70.0	63.7	F	62.5	8
352	83	70.0	63.7	F	62.2	8
353	83	70.0	63.7	F	61.0	8
354	85	70.5	63.0	M	72.5	5
355	85	70.5	63.0	M	69.0	5
356	85	70.5	63.0	M	67.0	5
357	85	70.5	63.0	F	64.5	5
358	85	70.5	63.0	F	64.0	5
359	86	70.0	63.5	M	71.0	4
360	86	70.0	63.5	M	67.5	4
361	86	70.0	63.5	F	67.5	4

362	86	70.0	63.5	F	63.5	4
363	87	70.0	63.0	M	68.0	4
364	87	70.0	63.0	M	67.0	4
365	87	70.0	63.0	F	63.7	4
366	87	70.0	63.0	F	62.0	4
367	88	70.0	63.0	M	70.0	4
368	88	70.0	63.0	M	66.5	4
369	88	70.0	63.0	F	62.0	4
370	88	70.0	63.0	F	61.0	4
371	89	70.5	62.0	M	72.0	8
372	89	70.5	62.0	M	70.0	8
373	89	70.5	62.0	M	69.5	8
374	89	70.5	62.0	M	69.5	8
375	89	70.5	62.0	M	68.0	8
376	89	70.5	62.0	F	65.0	8
377	89	70.5	62.0	F	64.0	8
378	89	70.5	62.0	F	63.0	8
379	90	70.3	62.7	M	70.7	7
380	90	70.3	62.7	M	69.7	7
381	90	70.3	62.7	M	69.2	7
382	90	70.3	62.7	M	65.2	7
383	90	70.3	62.7	F	64.0	7
384	90	70.3	62.7	F	63.5	7
385	90	70.3	62.7	F	63.2	7
386	91	70.5	62.0	M	72.0	3
387	91	70.5	62.0	M	72.0	3
388	91	70.5	62.0	F	60.0	3
389	92	70.0	61.0	M	71.2	2
390	92	70.0	61.0	M	67.0	2
391	93	70.0	60.0	M	67.0	4
392	93	70.0	60.0	M	64.5	4
393	93	70.0	60.0	F	65.0	4
394	93	70.0	60.0	F	63.0	4
395	94	70.0	60.0	F	65.0	2
396	94	70.0	60.0	F	65.0	2
397	95	70.0	58.5	M	71.5	3
398	95	70.0	58.5	M	64.5	3
399	95	70.0	58.5	F	63.0	3
400	96	70.0	58.0	M	72.0	5
401	96	70.0	58.0	M	66.0	5
402	96	70.0	58.0	F	66.0	5
403	96	70.0	58.0	F	65.0	5
404	96	70.0	58.0	F	63.0	5
405	97	69.0	68.5	M	75.0	10
406	97	69.0	68.5	M	71.0	10
407	97	69.0	68.5	M	70.0	10
408	97	69.0	68.5	F	66.0	10
409	97	69.0	68.5	F	66.0	10
410	97	69.0	68.5	F	65.5	10
411	97	69.0	68.5	F	65.0	10

412	97	69.0	68.5	F	65.0	10
413	97	69.0	68.5	F	64.0	10
414	97	69.0	68.5	F	64.0	10
415	98	69.0	67.0	F	64.0	1
416	99	69.0	66.0	M	73.0	8
417	99	69.0	66.0	M	72.0	8
418	99	69.0	66.0	M	71.7	8
419	99	69.0	66.0	M	71.5	8
420	99	69.0	66.0	F	65.5	8
421	99	69.0	66.0	F	65.0	8
422	99	69.0	66.0	F	62.7	8
423	99	69.0	66.0	F	62.5	8
424	100	69.0	66.0	M	71.2	3
425	100	69.0	66.0	M	71.0	3
426	100	69.0	66.0	M	70.0	3
427	101	69.0	66.7	M	75.0	6
428	101	69.0	66.7	M	74.0	6
429	101	69.0	66.7	M	72.0	6
430	101	69.0	66.7	M	68.5	6
431	101	69.0	66.7	M	67.0	6
432	101	69.0	66.7	M	66.0	6
433	102	69.0	66.0	M	70.0	6
434	102	69.0	66.0	M	68.5	6
435	102	69.0	66.0	M	68.0	6
436	102	69.0	66.0	F	65.0	6
437	102	69.0	66.0	F	63.0	6
438	102	69.0	66.0	F	62.5	6
439	103	69.0	66.5	M	73.0	5
440	103	69.0	66.5	M	71.0	5
441	103	69.0	66.5	M	70.5	5
442	103	69.0	66.5	M	70.5	5
443	103	69.0	66.5	F	61.0	5
444	104	69.5	66.5	M	70.5	4
445	104	69.5	66.5	M	67.5	4
446	104	69.5	66.5	F	64.5	4
447	104	69.5	66.5	F	64.0	4
448	105	69.0	66.5	M	71.0	6
449	105	69.0	66.5	F	68.5	6
450	105	69.0	66.5	F	67.5	6
451	105	69.0	66.5	F	66.0	6
452	105	69.0	66.5	F	63.0	6
453	105	69.0	66.5	F	63.0	6
454	106	69.5	66.0	M	71.0	7
455	106	69.5	66.0	M	71.0	7
456	106	69.5	66.0	M	70.5	7
457	106	69.5	66.0	M	70.5	7
458	106	69.5	66.0	F	66.5	7
459	106	69.5	66.0	F	65.5	7
460	106	69.5	66.0	F	64.5	7
461	107	69.0	66.0	M	73.0	9

462	107	69.0	66.0	M	72.0	9
463	107	69.0	66.0	M	69.0	9
464	107	69.0	66.0	M	69.0	9
465	107	69.0	66.0	F	66.5	9
466	107	69.0	66.0	F	65.5	9
467	107	69.0	66.0	F	65.5	9
468	107	69.0	66.0	F	65.0	9
469	107	69.0	66.0	F	64.0	9
470	108	69.0	65.0	M	70.0	7
471	108	69.0	65.0	M	68.5	7
472	108	69.0	65.0	M	67.0	7
473	108	69.0	65.0	F	65.0	7
474	108	69.0	65.0	F	64.0	7
475	108	69.0	65.0	F	63.5	7
476	108	69.0	65.0	F	61.0	7
477	109	69.5	64.5	M	69.7	7
478	109	69.5	64.5	M	68.0	7
479	109	69.5	64.5	M	60.0	7
480	109	69.5	64.5	F	65.2	7
481	109	69.5	64.5	F	64.5	7
482	109	69.5	64.5	F	63.7	7
483	109	69.5	64.5	F	60.0	7
484	110	69.2	64.0	M	71.7	4
485	110	69.2	64.0	M	66.5	4
486	110	69.2	64.0	F	65.0	4
487	110	69.2	64.0	F	63.5	4
488	112	69.0	63.0	M	69.0	3
489	112	69.0	63.0	F	67.5	3
490	112	69.0	63.0	F	63.5	3
491	113	69.0	63.0	M	72.0	1
492	114	69.0	63.0	M	73.0	6
493	114	69.0	63.0	M	70.0	6
494	114	69.0	63.0	M	70.0	6
495	114	69.0	63.0	M	64.0	6
496	114	69.0	63.0	F	66.0	6
497	114	69.0	63.0	F	62.0	6
498	115	69.0	63.5	M	70.5	7
499	115	69.0	63.5	M	67.0	7
500	115	69.0	63.5	M	66.0	7
501	115	69.0	63.5	F	65.0	7
502	115	69.0	63.5	F	63.0	7
503	115	69.0	63.5	F	62.0	7
504	115	69.0	63.5	F	61.0	7
505	116	69.0	63.5	M	70.5	3
506	116	69.0	63.5	F	63.7	3
507	116	69.0	63.5	F	63.0	3
508	117	69.7	62.0	F	62.5	1
509	118	69.5	62.0	M	73.0	3
510	118	69.5	62.0	M	72.0	3
511	118	69.5	62.0	M	69.0	3

512	119	69.0	62.0	M	73.0	5
513	119	69.0	62.0	M	71.0	5
514	119	69.0	62.0	M	71.0	5
515	119	69.0	62.0	M	69.0	5
516	119	69.0	62.0	F	63.0	5
517	121	69.0	62.5	M	71.0	8
518	121	69.0	62.5	M	70.0	8
519	121	69.0	62.5	M	70.0	8
520	121	69.0	62.5	M	69.0	8
521	121	69.0	62.5	F	63.5	8
522	121	69.0	62.5	F	62.5	8
523	121	69.0	62.5	F	62.5	8
524	121	69.0	62.5	F	62.0	8
525	122	69.0	62.0	M	72.0	4
526	122	69.0	62.0	M	68.0	4
527	122	69.0	62.0	F	66.0	4
528	122	69.0	62.0	F	66.0	4
529	123	69.5	61.0	M	70.0	5
530	123	69.5	61.0	M	69.5	5
531	123	69.5	61.0	M	69.0	5
532	123	69.5	61.0	F	63.0	5
533	123	69.5	61.0	F	62.0	5
534	124	69.0	61.0	M	68.0	9
535	124	69.0	61.0	M	68.0	9
536	124	69.0	61.0	M	67.5	9
537	124	69.0	61.0	M	64.0	9
538	124	69.0	61.0	M	63.0	9
539	124	69.0	61.0	M	63.0	9
540	124	69.0	61.0	F	63.5	9
541	124	69.0	61.0	F	62.0	9
542	124	69.0	61.0	F	62.0	9
543	125	69.0	60.0	M	70.5	3
544	125	69.0	60.0	F	68.0	3
545	125	69.0	60.0	F	62.5	3
546	126	69.0	60.0	M	69.0	4
547	126	69.0	60.0	M	66.0	4
548	126	69.0	60.0	F	61.7	4
549	126	69.0	60.0	F	60.5	4
550	127	69.0	60.5	M	69.5	1
551	128	68.7	70.5	M	71.0	2
552	128	68.7	70.5	F	61.7	2
553	129	68.5	67.0	M	73.0	3
554	129	68.5	67.0	M	71.0	3
555	129	68.5	67.0	F	67.0	3
556	130	68.5	66.5	M	70.0	11
557	130	68.5	66.5	M	69.0	11
558	130	68.5	66.5	M	69.0	11
559	130	68.5	66.5	M	68.7	11
560	130	68.5	66.5	M	68.5	11
561	130	68.5	66.5	M	68.5	11

562	130	68.5	66.5	M	68.0	11
563	130	68.5	66.5	M	68.0	11
564	130	68.5	66.5	M	68.0	11
565	130	68.5	66.5	F	63.2	11
566	131	68.0	65.0	M	67.5	2
567	131	68.0	65.0	M	66.0	2
568	132	68.0	65.5	M	66.0	2
569	132	68.0	65.5	F	64.0	2
570	133	68.0	65.5	M	71.7	7
571	133	68.0	65.5	M	71.5	7
572	133	68.0	65.5	M	70.7	7
573	133	68.0	65.5	M	65.5	7
574	133	68.0	65.5	F	66.5	7
575	133	68.0	65.5	F	65.2	7
576	133	68.0	65.5	F	61.5	7
577	134	68.0	65.0	M	72.0	4
578	134	68.0	65.0	M	72.0	4
579	134	68.0	65.0	F	68.0	4
580	134	68.0	65.0	F	66.0	4
581	135	68.5	65.0	M	69.2	8
582	135	68.5	65.0	M	68.0	8
583	135	68.5	65.0	M	66.0	8
584	135	68.5	65.0	M	66.0	8
585	135	68.5	65.0	F	62.0	8
586	135	68.5	65.0	F	61.5	8
587	135	68.5	65.0	F	61.0	8
588	135	68.5	65.0	F	60.0	8
589	136	68.0	64.0	M	71.0	10
590	136	68.0	64.0	M	68.0	10
591	136	68.0	64.0	M	68.0	10
592	136	68.0	64.0	M	67.0	10
593	136	68.0	64.0	F	65.0	10
594	136	68.0	64.0	F	64.0	10
595	136	68.0	64.0	F	63.0	10
596	136	68.0	64.0	F	63.0	10
597	136	68.0	64.0	F	62.0	10
598	136	68.0	64.0	F	61.0	10
599	137	68.0	64.0	M	66.0	4
600	137	68.0	64.0	M	63.0	4
601	137	68.0	64.0	F	65.5	4
602	137	68.0	64.0	F	62.0	4
603	138	68.0	64.0	M	71.2	5
604	138	68.0	64.0	M	71.2	5
605	138	68.0	64.0	M	69.0	5
606	138	68.0	64.0	M	68.5	5
607	138	68.0	64.0	F	62.5	5
608	139	68.0	64.5	F	62.0	1
609	140	68.0	64.0	M	69.0	10
610	140	68.0	64.0	M	67.0	10
611	140	68.0	64.0	M	66.0	10

612	140	68.0	64.0	F	66.0	10
613	140	68.0	64.0	F	66.0	10
614	140	68.0	64.0	F	65.0	10
615	140	68.0	64.0	F	65.0	10
616	140	68.0	64.0	F	65.0	10
617	140	68.0	64.0	F	64.0	10
618	140	68.0	64.0	F	63.0	10
619	141	68.0	63.0	M	70.5	8
620	141	68.0	63.0	M	70.0	8
621	141	68.0	63.0	M	68.0	8
622	141	68.0	63.0	M	66.0	8
623	141	68.0	63.0	M	66.0	8
624	141	68.0	63.0	F	66.0	8
625	141	68.0	63.0	F	62.0	8
626	141	68.0	63.0	F	61.5	8
627	142	68.5	63.5	M	73.5	4
628	142	68.5	63.5	M	70.0	4
629	142	68.5	63.5	M	69.5	4
630	142	68.5	63.5	F	65.5	4
631	143	68.0	63.0	M	67.0	1
632	144	68.0	63.0	M	70.0	4
633	144	68.0	63.0	M	68.0	4
634	144	68.0	63.0	F	64.5	4
635	144	68.0	63.0	F	64.0	4
636	145	68.0	63.0	M	71.0	8
637	145	68.0	63.0	M	68.0	8
638	145	68.0	63.0	M	66.0	8
639	145	68.0	63.0	M	65.5	8
640	145	68.0	63.0	M	65.0	8
641	145	68.0	63.0	F	63.0	8
642	145	68.0	63.0	F	62.0	8
643	145	68.0	63.0	F	62.0	8
644	146	68.0	63.0	M	67.0	6
645	146	68.0	63.0	M	67.0	6
646	146	68.0	63.0	M	66.0	6
647	146	68.0	63.0	F	64.0	6
648	146	68.0	63.0	F	63.5	6
649	146	68.0	63.0	F	61.0	6
650	147	68.5	63.5	M	68.2	1
651	148	68.0	63.0	M	70.0	1
652	149	68.2	63.5	M	70.0	5
653	149	68.2	63.5	M	69.0	5
654	149	68.2	63.5	M	67.0	5
655	149	68.2	63.5	M	65.5	5
656	149	68.2	63.5	F	64.5	5
657	150	68.0	62.5	M	68.5	1
658	151	68.7	62.0	M	67.7	2
659	151	68.7	62.0	F	61.7	2
660	152	68.0	62.5	M	66.5	1
661	153	68.0	61.0	M	68.5	5

662	153	68.0	61.0	M	68.0	5
663	153	68.0	61.0	M	64.0	5
664	153	68.0	61.0	F	63.5	5
665	153	68.0	61.0	F	63.0	5
666	154	68.0	60.2	M	66.7	1
667	155	68.0	60.0	M	64.0	7
668	155	68.0	60.0	F	61.0	7
669	155	68.0	60.0	F	61.0	7
670	155	68.0	60.0	F	60.0	7
671	155	68.0	60.0	F	60.0	7
672	155	68.0	60.0	F	60.0	7
673	155	68.0	60.0	F	56.0	7
674	156	68.0	60.0	M	67.5	4
675	156	68.0	60.0	M	67.0	4
676	156	68.0	60.0	M	66.5	4
677	156	68.0	60.0	F	60.0	4
678	157	68.5	59.0	M	69.0	1
679	158	68.0	59.0	M	68.0	10
680	158	68.0	59.0	M	65.0	10
681	158	68.0	59.0	M	64.7	10
682	158	68.0	59.0	M	64.0	10
683	158	68.0	59.0	M	64.0	10
684	158	68.0	59.0	M	63.0	10
685	158	68.0	59.0	F	65.0	10
686	158	68.0	59.0	F	65.0	10
687	158	68.0	59.0	F	62.0	10
688	158	68.0	59.0	F	61.0	10
689	159	67.0	66.2	M	72.7	5
690	159	67.0	66.2	M	72.7	5
691	159	67.0	66.2	M	71.5	5
692	159	67.0	66.2	F	65.5	5
693	159	67.0	66.2	F	63.5	5
694	160	67.0	66.5	M	71.0	1
695	162	67.0	65.0	M	69.7	6
696	162	67.0	65.0	M	67.5	6
697	162	67.0	65.0	F	65.5	6
698	162	67.0	65.0	F	65.0	6
699	162	67.0	65.0	F	64.5	6
700	162	67.0	65.0	F	63.5	6
701	163	67.0	65.5	M	70.0	5
702	163	67.0	65.5	M	69.0	5
703	163	67.0	65.5	F	65.5	5
704	163	67.0	65.5	F	65.5	5
705	163	67.0	65.5	F	63.0	5
706	164	67.0	65.5	M	70.0	4
707	164	67.0	65.5	M	67.7	4
708	164	67.0	65.5	F	63.0	4
709	164	67.0	65.5	F	60.0	4
710	165	67.0	65.0	M	65.0	3
711	165	67.0	65.0	F	62.0	3

712	165	67.0	65.0	F	62.0	3
713	166	67.5	65.0	M	71.0	11
714	166	67.5	65.0	M	69.0	11
715	166	67.5	65.0	F	64.0	11
716	166	67.5	65.0	F	64.0	11
717	166	67.5	65.0	F	63.0	11
718	166	67.5	65.0	F	63.0	11
719	166	67.5	65.0	F	63.0	11
720	166	67.5	65.0	F	63.0	11
721	166	67.5	65.0	F	63.0	11
722	166	67.5	65.0	F	62.5	11
723	166	67.5	65.0	F	62.0	11
724	167	67.0	64.0	M	71.5	4
725	167	67.0	64.0	M	70.0	4
726	167	67.0	64.0	M	67.0	4
727	167	67.0	64.0	M	67.0	4
728	168	67.0	63.5	M	71.0	8
729	168	67.0	63.5	M	70.2	8
730	168	67.0	63.5	M	69.2	8
731	168	67.0	63.5	M	68.5	8
732	168	67.0	63.5	M	68.0	8
733	168	67.0	63.5	M	67.0	8
734	168	67.0	63.5	M	65.5	8
735	168	67.0	63.5	F	63.5	8
736	169	67.0	63.0	M	69.0	3
737	169	67.0	63.0	M	68.0	3
738	169	67.0	63.0	F	63.0	3
739	170	67.5	62.0	M	70.0	5
740	170	67.5	62.0	M	69.5	5
741	170	67.5	62.0	M	69.0	5
742	170	67.5	62.0	M	68.5	5
743	170	67.5	62.0	F	66.0	5
744	171	67.0	61.0	M	67.0	1
745	172	66.0	67.0	M	70.5	8
746	172	66.0	67.0	M	70.5	8
747	172	66.0	67.0	M	67.0	8
748	172	66.0	67.0	M	66.0	8
749	172	66.0	67.0	M	66.0	8
750	172	66.0	67.0	F	62.0	8
751	172	66.0	67.0	F	62.0	8
752	172	66.0	67.0	F	61.5	8
753	173	66.0	67.0	M	72.0	9
754	173	66.0	67.0	M	65.0	9
755	173	66.0	67.0	M	65.0	9
756	173	66.0	67.0	F	67.0	9
757	173	66.0	67.0	F	64.0	9
758	173	66.0	67.0	F	64.0	9
759	173	66.0	67.0	F	62.0	9
760	173	66.0	67.0	F	60.0	9
761	173	66.0	67.0	F	60.0	9

762	174	66.0	66.0	M	66.0	5
763	174	66.0	66.0	M	65.0	5
764	174	66.0	66.0	F	67.0	5
765	174	66.0	66.0	F	66.5	5
766	174	66.0	66.0	F	65.5	5
767	175	66.0	66.0	M	72.0	6
768	175	66.0	66.0	M	68.0	6
769	175	66.0	66.0	F	66.0	6
770	175	66.0	66.0	F	65.0	6
771	175	66.0	66.0	F	62.0	6
772	175	66.0	66.0	F	61.0	6
773	176	66.5	65.0	M	68.7	8
774	176	66.5	65.0	M	68.5	8
775	176	66.5	65.0	M	66.5	8
776	176	66.5	65.0	M	64.5	8
777	176	66.5	65.0	F	62.5	8
778	176	66.5	65.0	F	60.5	8
779	176	66.5	65.0	F	60.5	8
780	176	66.5	65.0	F	57.5	8
781	177	66.0	65.5	M	72.0	5
782	177	66.0	65.5	M	71.0	5
783	177	66.0	65.5	M	67.0	5
784	177	66.0	65.5	F	66.0	5
785	177	66.0	65.5	F	65.0	5
786	178	66.0	63.0	M	70.0	1
787	179	66.0	63.5	F	64.5	2
788	179	66.0	63.5	F	62.0	2
789	180	66.5	63.0	M	67.2	6
790	180	66.5	63.0	M	67.0	6
791	180	66.5	63.0	M	65.0	6
792	180	66.5	63.0	F	65.0	6
793	180	66.5	63.0	F	65.0	6
794	180	66.5	63.0	F	63.0	6
795	181	66.5	62.5	M	70.0	7
796	181	66.5	62.5	M	68.0	7
797	181	66.5	62.5	F	63.5	7
798	181	66.5	62.5	F	62.5	7
799	181	66.5	62.5	F	62.5	7
800	181	66.5	62.5	F	62.5	7
801	181	66.5	62.5	F	62.5	7
802	182	66.0	61.5	M	70.0	1
803	183	66.0	60.0	M	68.0	4
804	183	66.0	60.0	M	67.0	4
805	183	66.0	60.0	M	65.0	4
806	183	66.0	60.0	F	60.0	4
807	184	66.0	60.0	M	65.0	1
808	185	66.0	59.0	M	68.0	15
809	185	66.0	59.0	M	67.0	15
810	185	66.0	59.0	M	66.5	15
811	185	66.0	59.0	M	66.0	15

812	185	66.0	59.0	M	65.7	15
813	185	66.0	59.0	M	65.5	15
814	185	66.0	59.0	M	65.0	15
815	185	66.0	59.0	F	65.0	15
816	185	66.0	59.0	F	64.0	15
817	185	66.0	59.0	F	63.0	15
818	185	66.0	59.0	F	62.0	15
819	185	66.0	59.0	F	61.0	15
820	185	66.0	59.0	F	60.0	15
821	185	66.0	59.0	F	58.0	15
822	185	66.0	59.0	F	57.0	15
823	186	65.0	67.0	M	66.5	4
824	186	65.0	67.0	M	66.0	4
825	186	65.0	67.0	M	66.0	4
826	186	65.0	67.0	F	65.0	4
827	187	65.0	67.0	F	63.0	1
828	188	65.0	66.0	M	63.0	4
829	188	65.0	66.0	F	63.0	4
830	188	65.0	66.0	F	63.0	4
831	188	65.0	66.0	F	60.0	4
832	190	65.0	65.0	M	69.0	9
833	190	65.0	65.0	M	68.0	9
834	190	65.0	65.0	M	68.0	9
835	190	65.0	65.0	F	65.0	9
836	190	65.0	65.0	F	65.0	9
837	190	65.0	65.0	F	62.0	9
838	190	65.0	65.0	F	62.0	9
839	190	65.0	65.0	F	61.0	9
840	190	65.0	65.0	F	59.0	9
841	191	65.0	65.5	M	70.7	2
842	191	65.0	65.5	F	65.5	2
843	192	65.0	65.0	M	69.2	6
844	192	65.0	65.0	M	69.0	6
845	192	65.0	65.0	M	68.0	6
846	192	65.0	65.0	M	67.7	6
847	192	65.0	65.0	F	64.5	6
848	192	65.0	65.0	F	60.5	6
849	193	65.0	64.0	M	67.0	6
850	193	65.0	64.0	M	67.0	6
851	193	65.0	64.0	F	64.0	6
852	193	65.0	64.0	F	64.0	6
853	193	65.0	64.0	F	62.5	6
854	193	65.0	64.0	F	60.5	6
855	194	65.0	63.0	M	70.0	2
856	194	65.0	63.0	F	63.0	2
857	195	65.0	63.0	M	66.0	3
858	195	65.0	63.0	M	66.0	3
859	195	65.0	63.0	F	63.0	3
860	196	65.5	63.0	M	71.0	4
861	196	65.5	63.0	M	71.0	4

862	196	65.5	63.0	M	69.0	4
863	196	65.5	63.0	F	63.5	4
864	197	65.5	60.0	M	68.0	5
865	197	65.5	60.0	M	68.0	5
866	197	65.5	60.0	M	67.0	5
867	197	65.5	60.0	M	67.0	5
868	197	65.5	60.0	F	62.0	5
869	198	64.0	64.0	M	71.5	7
870	198	64.0	64.0	M	68.0	7
871	198	64.0	64.0	F	65.5	7
872	198	64.0	64.0	F	64.0	7
873	198	64.0	64.0	F	62.0	7
874	198	64.0	64.0	F	62.0	7
875	198	64.0	64.0	F	61.0	7
876	199	64.0	64.0	M	70.5	7
877	199	64.0	64.0	M	68.0	7
878	199	64.0	64.0	F	67.0	7
879	199	64.0	64.0	F	65.0	7
880	199	64.0	64.0	F	64.0	7
881	199	64.0	64.0	F	64.0	7
882	199	64.0	64.0	F	60.0	7
883	200	64.0	63.0	M	64.5	1
884	201	64.0	60.0	M	66.0	2
885	201	64.0	60.0	F	60.0	2
886	203	62.0	66.0	M	64.0	3
887	203	62.0	66.0	F	62.0	3
888	203	62.0	66.0	F	61.0	3
889	204	62.5	63.0	M	66.5	2
890	204	62.5	63.0	F	57.0	2
891	136A	68.5	65.0	M	72.0	8
892	136A	68.5	65.0	M	70.5	8
893	136A	68.5	65.0	M	68.7	8
894	136A	68.5	65.0	M	68.5	8
895	136A	68.5	65.0	M	67.7	8
896	136A	68.5	65.0	F	64.0	8
897	136A	68.5	65.0	F	63.5	8
898	136A	68.5	65.0	F	63.0	8

```
> read.csv("~/Desktop/Galton.csv")
```

	Family	Father	Mother	Gender	Height	Kids
1	1	78.5	67.0	M	73.2	4
2	1	78.5	67.0	F	69.2	4
3	1	78.5	67.0	F	69.0	4
4	1	78.5	67.0	F	69.0	4
5	2	75.5	66.5	M	73.5	4
6	2	75.5	66.5	M	72.5	4
7	2	75.5	66.5	F	65.5	4
8	2	75.5	66.5	F	65.5	4
9	3	75.0	64.0	M	71.0	2
10	3	75.0	64.0	F	68.0	2
11	4	75.0	64.0	M	70.5	5

12	4	75.0	64.0	M	68.5	5
13	4	75.0	64.0	F	67.0	5
14	4	75.0	64.0	F	64.5	5
15	4	75.0	64.0	F	63.0	5
16	5	75.0	58.5	M	72.0	6
17	5	75.0	58.5	M	69.0	6
18	5	75.0	58.5	M	68.0	6
19	5	75.0	58.5	F	66.5	6
20	5	75.0	58.5	F	62.5	6
21	5	75.0	58.5	F	62.5	6
22	6	74.0	68.0	F	69.5	1
23	7	74.0	68.0	M	76.5	6
24	7	74.0	68.0	M	74.0	6
25	7	74.0	68.0	M	73.0	6
26	7	74.0	68.0	M	73.0	6
27	7	74.0	68.0	F	70.5	6
28	7	74.0	68.0	F	64.0	6
29	8	74.0	66.5	F	70.5	3
30	8	74.0	66.5	F	68.0	3
31	8	74.0	66.5	F	66.0	3
32	9	74.5	66.0	F	66.0	1
33	10	74.0	65.5	F	65.5	1
34	11	74.0	62.0	M	74.0	8
35	11	74.0	62.0	M	70.0	8
36	11	74.0	62.0	F	68.0	8
37	11	74.0	62.0	F	67.0	8
38	11	74.0	62.0	F	67.0	8
39	11	74.0	62.0	F	66.0	8
40	11	74.0	62.0	F	63.5	8
41	11	74.0	62.0	F	63.0	8
42	12	74.0	61.0	F	65.0	1
43	14	73.0	67.0	M	68.0	2
44	14	73.0	67.0	M	67.0	2
45	15	73.0	66.5	M	71.0	3
46	15	73.0	66.5	M	70.5	3
47	15	73.0	66.5	F	66.7	3
48	16	73.0	65.0	M	72.0	9
49	16	73.0	65.0	M	70.5	9
50	16	73.0	65.0	M	70.2	9
51	16	73.0	65.0	M	70.2	9
52	16	73.0	65.0	M	69.2	9
53	16	73.0	65.0	F	68.7	9
54	16	73.0	65.0	F	66.5	9
55	16	73.0	65.0	F	64.5	9
56	16	73.0	65.0	F	63.5	9
57	17	73.0	64.5	M	74.0	6
58	17	73.0	64.5	M	73.0	6
59	17	73.0	64.5	M	71.5	6
60	17	73.0	64.5	M	62.5	6
61	17	73.0	64.5	F	66.5	6

62	17	73.0	64.5	F	62.3	6
63	18	73.0	64.0	F	66.0	3
64	18	73.0	64.0	F	64.5	3
65	18	73.0	64.0	F	64.0	3
66	19	73.2	63.0	F	62.7	1
67	20	72.7	69.0	M	73.2	8
68	20	72.7	69.0	M	73.0	8
69	20	72.7	69.0	M	72.7	8
70	20	72.7	69.0	F	70.0	8
71	20	72.7	69.0	F	69.0	8
72	20	72.7	69.0	F	68.5	8
73	20	72.7	69.0	F	68.0	8
74	20	72.7	69.0	F	66.0	8
75	21	72.0	68.0	M	73.0	3
76	21	72.0	68.0	F	68.5	3
77	21	72.0	68.0	F	68.0	3
78	22	72.0	67.0	M	73.0	3
79	22	72.0	67.0	M	71.0	3
80	22	72.0	67.0	F	67.0	3
81	23	72.0	65.0	M	74.2	7
82	23	72.0	65.0	M	70.5	7
83	23	72.0	65.0	M	69.5	7
84	23	72.0	65.0	F	66.0	7
85	23	72.0	65.0	F	65.5	7
86	23	72.0	65.0	F	65.0	7
87	23	72.0	65.0	F	65.0	7
88	24	72.0	65.5	F	65.5	1
89	25	72.0	64.0	F	66.0	2
90	25	72.0	64.0	F	63.0	2
91	26	72.0	63.0	M	70.5	5
92	26	72.0	63.0	M	70.5	5
93	26	72.0	63.0	M	69.0	5
94	26	72.0	63.0	F	65.0	5
95	26	72.0	63.0	F	63.0	5
96	27	72.0	63.0	M	69.0	3
97	27	72.0	63.0	M	67.0	3
98	27	72.0	63.0	F	63.0	3
99	28	72.0	63.0	M	73.0	6
100	28	72.0	63.0	M	67.0	6
101	28	72.0	63.0	F	70.5	6
102	28	72.0	63.0	F	70.0	6
103	28	72.0	63.0	F	66.5	6
104	28	72.0	63.0	F	63.0	6
105	29	72.5	63.5	F	67.5	3
106	29	72.5	63.5	F	67.2	3
107	29	72.5	63.5	F	66.7	3
108	30	72.0	62.0	F	64.0	1
109	31	72.5	62.0	M	71.0	6
110	31	72.5	62.0	M	70.0	6
111	31	72.5	62.0	M	70.0	6

112	31	72.5	62.0	F	66.0	6
113	31	72.5	62.0	F	65.0	6
114	31	72.5	62.0	F	65.0	6
115	32	72.0	62.0	M	74.0	5
116	32	72.0	62.0	M	72.0	5
117	32	72.0	62.0	M	69.0	5
118	32	72.0	62.0	F	67.5	5
119	32	72.0	62.0	F	63.5	5
120	33	72.0	62.0	M	72.0	5
121	33	72.0	62.0	M	71.5	5
122	33	72.0	62.0	M	71.5	5
123	33	72.0	62.0	M	70.0	5
124	33	72.0	62.0	F	68.0	5
125	34	72.0	61.0	F	65.7	1
126	35	71.0	69.0	M	78.0	5
127	35	71.0	69.0	M	74.0	5
128	35	71.0	69.0	M	73.0	5
129	35	71.0	69.0	M	72.0	5
130	35	71.0	69.0	F	67.0	5
131	36	71.0	67.0	M	73.2	4
132	36	71.0	67.0	M	73.0	4
133	36	71.0	67.0	M	69.0	4
134	36	71.0	67.0	F	67.0	4
135	37	71.0	66.0	M	70.0	4
136	37	71.0	66.0	F	67.0	4
137	37	71.0	66.0	F	67.0	4
138	37	71.0	66.0	F	66.5	4
139	38	71.0	66.0	M	70.0	6
140	38	71.0	66.0	M	69.0	6
141	38	71.0	66.0	M	68.5	6
142	38	71.0	66.0	F	66.0	6
143	38	71.0	66.0	F	64.5	6
144	38	71.0	66.0	F	63.0	6
145	39	71.0	66.0	M	71.0	2
146	39	71.0	66.0	F	67.0	2
147	40	71.0	66.0	M	76.0	5
148	40	71.0	66.0	M	72.0	5
149	40	71.0	66.0	M	71.0	5
150	40	71.0	66.0	M	66.0	5
151	40	71.0	66.0	F	66.0	5
152	41	71.7	65.5	M	70.5	1
153	42	71.0	65.5	M	72.0	6
154	42	71.0	65.5	M	72.0	6
155	42	71.0	65.5	M	71.0	6
156	42	71.0	65.5	M	69.0	6
157	42	71.0	65.5	F	66.0	6
158	42	71.0	65.5	F	65.0	6
159	43	71.5	65.5	M	73.0	2
160	43	71.5	65.5	F	65.2	2
161	44	71.5	65.0	M	68.5	2

162	44	71.5	65.0	M	67.7	2
163	45	71.0	65.0	M	68.0	3
164	45	71.0	65.0	M	68.0	3
165	45	71.0	65.0	F	62.0	3
166	46	71.0	64.0	F	68.0	8
167	46	71.0	64.0	F	68.0	8
168	46	71.0	64.0	F	67.5	8
169	46	71.0	64.0	F	66.5	8
170	46	71.0	64.0	F	66.5	8
171	46	71.0	64.0	F	66.0	8
172	46	71.0	64.0	F	65.5	8
173	46	71.0	64.0	F	65.0	8
174	47	71.7	64.5	M	72.0	4
175	47	71.7	64.5	M	71.0	4
176	47	71.7	64.5	M	70.5	4
177	47	71.7	64.5	F	67.0	4
178	48	71.0	64.0	M	68.0	3
179	48	71.0	64.0	M	68.0	3
180	48	71.0	64.0	M	68.0	3
181	49	71.5	64.5	M	72.0	7
182	49	71.5	64.5	M	71.0	7
183	49	71.5	64.5	M	70.0	7
184	49	71.5	64.5	F	66.0	7
185	49	71.5	64.5	F	64.5	7
186	49	71.5	64.5	F	64.5	7
187	49	71.5	64.5	F	62.0	7
188	51	71.2	63.0	F	67.5	2
189	51	71.2	63.0	F	64.5	2
190	52	71.0	63.5	M	71.0	5
191	52	71.0	63.5	M	67.0	5
192	52	71.0	63.5	F	66.0	5
193	52	71.0	63.5	F	65.0	5
194	52	71.0	63.5	F	63.5	5
195	53	71.0	63.0	M	71.0	9
196	53	71.0	63.0	M	70.0	9
197	53	71.0	63.0	M	70.0	9
198	53	71.0	63.0	M	64.0	9
199	53	71.0	63.0	F	65.0	9
200	53	71.0	63.0	F	65.0	9
201	53	71.0	63.0	F	64.0	9
202	53	71.0	63.0	F	63.0	9
203	53	71.0	63.0	F	63.0	9
204	54	71.0	63.0	M	71.0	4
205	54	71.0	63.0	M	71.0	4
206	54	71.0	63.0	M	70.0	4
207	54	71.0	63.0	F	63.5	4
208	55	71.0	62.0	M	71.0	5
209	55	71.0	62.0	M	70.0	5
210	55	71.0	62.0	F	64.5	5
211	55	71.0	62.0	F	62.5	5

212	55	71.0	62.0	F	61.5	5
213	56	71.0	62.0	M	72.0	5
214	56	71.0	62.0	M	70.5	5
215	56	71.0	62.0	M	70.5	5
216	56	71.0	62.0	F	64.5	5
217	56	71.0	62.0	F	60.0	5
218	57	71.0	62.5	M	70.0	5
219	57	71.0	62.5	F	64.0	5
220	57	71.0	62.5	F	64.0	5
221	57	71.0	62.5	F	64.0	5
222	57	71.0	62.5	F	62.5	5
223	58	71.0	62.0	M	70.5	7
224	58	71.0	62.0	M	70.0	7
225	58	71.0	62.0	M	69.0	7
226	58	71.0	62.0	M	69.0	7
227	58	71.0	62.0	M	66.0	7
228	58	71.0	62.0	F	64.5	7
229	58	71.0	62.0	F	64.0	7
230	59	71.0	61.0	F	62.0	1
231	60	71.0	58.0	M	71.5	2
232	60	71.0	58.0	M	69.0	2
233	61	70.0	69.0	M	71.0	4
234	61	70.0	69.0	M	70.0	4
235	61	70.0	69.0	M	69.0	4
236	61	70.0	69.0	F	69.0	4
237	62	70.0	69.0	M	70.0	6
238	62	70.0	69.0	M	68.7	6
239	62	70.0	69.0	F	68.0	6
240	62	70.0	69.0	F	66.0	6
241	62	70.0	69.0	F	64.0	6
242	62	70.0	69.0	F	62.0	6
243	63	70.0	68.0	M	75.0	1
244	64	70.0	67.0	M	70.0	5
245	64	70.0	67.0	M	69.0	5
246	64	70.0	67.0	F	66.0	5
247	64	70.0	67.0	F	64.0	5
248	64	70.0	67.0	F	60.0	5
249	65	70.0	67.0	F	67.5	1
250	66	70.0	66.5	M	73.0	11
251	66	70.0	66.5	M	72.0	11
252	66	70.0	66.5	M	72.0	11
253	66	70.0	66.5	M	66.5	11
254	66	70.0	66.5	F	69.2	11
255	66	70.0	66.5	F	67.2	11
256	66	70.0	66.5	F	66.5	11
257	66	70.0	66.5	F	66.0	11
258	66	70.0	66.5	F	66.0	11
259	66	70.0	66.5	F	64.2	11
260	66	70.0	66.5	F	63.7	11
261	67	70.5	65.0	M	72.0	4

262	67	70.5	65.0	M	70.2	4
263	67	70.5	65.0	M	69.0	4
264	67	70.5	65.0	M	68.5	4
265	68	70.5	65.0	F	68.0	5
266	68	70.5	65.0	F	65.0	5
267	68	70.5	65.0	F	61.5	5
268	68	70.5	65.0	F	61.0	5
269	68	70.5	65.0	F	61.0	5
270	69	70.0	65.0	M	73.0	8
271	69	70.0	65.0	M	72.0	8
272	69	70.0	65.0	M	70.5	8
273	69	70.0	65.0	M	65.0	8
274	69	70.0	65.0	M	65.0	8
275	69	70.0	65.0	F	64.5	8
276	69	70.0	65.0	F	63.0	8
277	69	70.0	65.0	F	62.0	8
278	70	70.0	65.0	M	67.0	5
279	70	70.0	65.0	M	65.0	5
280	70	70.0	65.0	F	64.5	5
281	70	70.0	65.0	F	62.5	5
282	70	70.0	65.0	F	62.5	5
283	71	70.0	65.0	M	70.0	6
284	71	70.0	65.0	M	70.0	6
285	71	70.0	65.0	F	67.0	6
286	71	70.0	65.0	F	65.0	6
287	71	70.0	65.0	F	65.0	6
288	71	70.0	65.0	F	63.0	6
289	72	70.0	65.0	M	79.0	7
290	72	70.0	65.0	M	75.0	7
291	72	70.0	65.0	M	71.0	7
292	72	70.0	65.0	F	69.0	7
293	72	70.0	65.0	F	67.0	7
294	72	70.0	65.0	F	65.7	7
295	72	70.0	65.0	F	62.0	7
296	73	70.0	65.0	M	73.0	3
297	73	70.0	65.0	M	72.5	3
298	73	70.0	65.0	F	65.0	3
299	74	70.0	65.0	M	69.0	2
300	74	70.0	65.0	M	69.0	2
301	75	70.0	64.7	M	72.0	7
302	75	70.0	64.7	M	70.0	7
303	75	70.0	64.7	M	68.7	7
304	75	70.0	64.7	F	66.5	7
305	75	70.0	64.7	F	65.5	7
306	75	70.0	64.7	F	64.7	7
307	75	70.0	64.7	F	64.5	7
308	76	70.0	64.0	M	70.7	7
309	76	70.0	64.0	M	70.0	7
310	76	70.0	64.0	M	68.0	7
311	76	70.0	64.0	M	67.0	7

312	76	70.0	64.0	M	66.0	7
313	76	70.0	64.0	M	65.0	7
314	76	70.0	64.0	F	67.0	7
315	77	70.0	64.0	M	70.0	4
316	77	70.0	64.0	M	68.0	4
317	77	70.0	64.0	M	66.7	4
318	77	70.0	64.0	F	65.5	4
319	78	70.0	64.2	M	72.0	5
320	78	70.0	64.2	M	70.0	5
321	78	70.0	64.2	F	62.5	5
322	78	70.0	64.2	F	61.2	5
323	78	70.0	64.2	F	60.1	5
324	79	70.5	64.0	M	74.0	8
325	79	70.5	64.0	M	69.5	8
326	79	70.5	64.0	M	69.0	8
327	79	70.5	64.0	M	68.0	8
328	79	70.5	64.0	M	68.0	8
329	79	70.5	64.0	M	68.0	8
330	79	70.5	64.0	F	65.5	8
331	79	70.5	64.0	F	65.0	8
332	80	70.5	64.5	F	60.0	1
333	81	70.0	64.0	M	68.0	4
334	81	70.0	64.0	F	65.0	4
335	81	70.0	64.0	F	64.0	4
336	81	70.0	64.0	F	62.0	4
337	82	70.0	64.0	M	71.0	9
338	82	70.0	64.0	M	70.0	9
339	82	70.0	64.0	M	70.0	9
340	82	70.0	64.0	M	70.0	9
341	82	70.0	64.0	M	69.5	9
342	82	70.0	64.0	M	68.5	9
343	82	70.0	64.0	F	69.0	9
344	82	70.0	64.0	F	65.0	9
345	82	70.0	64.0	F	64.0	9
346	83	70.0	63.7	M	70.0	8
347	83	70.0	63.7	M	67.0	8
348	83	70.0	63.7	M	65.5	8
349	83	70.0	63.7	F	63.7	8
350	83	70.0	63.7	F	63.2	8
351	83	70.0	63.7	F	62.5	8
352	83	70.0	63.7	F	62.2	8
353	83	70.0	63.7	F	61.0	8
354	85	70.5	63.0	M	72.5	5
355	85	70.5	63.0	M	69.0	5
356	85	70.5	63.0	M	67.0	5
357	85	70.5	63.0	F	64.5	5
358	85	70.5	63.0	F	64.0	5
359	86	70.0	63.5	M	71.0	4
360	86	70.0	63.5	M	67.5	4
361	86	70.0	63.5	F	67.5	4

362	86	70.0	63.5	F	63.5	4
363	87	70.0	63.0	M	68.0	4
364	87	70.0	63.0	M	67.0	4
365	87	70.0	63.0	F	63.7	4
366	87	70.0	63.0	F	62.0	4
367	88	70.0	63.0	M	70.0	4
368	88	70.0	63.0	M	66.5	4
369	88	70.0	63.0	F	62.0	4
370	88	70.0	63.0	F	61.0	4
371	89	70.5	62.0	M	72.0	8
372	89	70.5	62.0	M	70.0	8
373	89	70.5	62.0	M	69.5	8
374	89	70.5	62.0	M	69.5	8
375	89	70.5	62.0	M	68.0	8
376	89	70.5	62.0	F	65.0	8
377	89	70.5	62.0	F	64.0	8
378	89	70.5	62.0	F	63.0	8
379	90	70.3	62.7	M	70.7	7
380	90	70.3	62.7	M	69.7	7
381	90	70.3	62.7	M	69.2	7
382	90	70.3	62.7	M	65.2	7
383	90	70.3	62.7	F	64.0	7
384	90	70.3	62.7	F	63.5	7
385	90	70.3	62.7	F	63.2	7
386	91	70.5	62.0	M	72.0	3
387	91	70.5	62.0	M	72.0	3
388	91	70.5	62.0	F	60.0	3
389	92	70.0	61.0	M	71.2	2
390	92	70.0	61.0	M	67.0	2
391	93	70.0	60.0	M	67.0	4
392	93	70.0	60.0	M	64.5	4
393	93	70.0	60.0	F	65.0	4
394	93	70.0	60.0	F	63.0	4
395	94	70.0	60.0	F	65.0	2
396	94	70.0	60.0	F	65.0	2
397	95	70.0	58.5	M	71.5	3
398	95	70.0	58.5	M	64.5	3
399	95	70.0	58.5	F	63.0	3
400	96	70.0	58.0	M	72.0	5
401	96	70.0	58.0	M	66.0	5
402	96	70.0	58.0	F	66.0	5
403	96	70.0	58.0	F	65.0	5
404	96	70.0	58.0	F	63.0	5
405	97	69.0	68.5	M	75.0	10
406	97	69.0	68.5	M	71.0	10
407	97	69.0	68.5	M	70.0	10
408	97	69.0	68.5	F	66.0	10
409	97	69.0	68.5	F	66.0	10
410	97	69.0	68.5	F	65.5	10
411	97	69.0	68.5	F	65.0	10

412	97	69.0	68.5	F	65.0	10
413	97	69.0	68.5	F	64.0	10
414	97	69.0	68.5	F	64.0	10
415	98	69.0	67.0	F	64.0	1
416	99	69.0	66.0	M	73.0	8
417	99	69.0	66.0	M	72.0	8
418	99	69.0	66.0	M	71.7	8
419	99	69.0	66.0	M	71.5	8
420	99	69.0	66.0	F	65.5	8
421	99	69.0	66.0	F	65.0	8
422	99	69.0	66.0	F	62.7	8
423	99	69.0	66.0	F	62.5	8
424	100	69.0	66.0	M	71.2	3
425	100	69.0	66.0	M	71.0	3
426	100	69.0	66.0	M	70.0	3
427	101	69.0	66.7	M	75.0	6
428	101	69.0	66.7	M	74.0	6
429	101	69.0	66.7	M	72.0	6
430	101	69.0	66.7	M	68.5	6
431	101	69.0	66.7	M	67.0	6
432	101	69.0	66.7	M	66.0	6
433	102	69.0	66.0	M	70.0	6
434	102	69.0	66.0	M	68.5	6
435	102	69.0	66.0	M	68.0	6
436	102	69.0	66.0	F	65.0	6
437	102	69.0	66.0	F	63.0	6
438	102	69.0	66.0	F	62.5	6
439	103	69.0	66.5	M	73.0	5
440	103	69.0	66.5	M	71.0	5
441	103	69.0	66.5	M	70.5	5
442	103	69.0	66.5	M	70.5	5
443	103	69.0	66.5	F	61.0	5
444	104	69.5	66.5	M	70.5	4
445	104	69.5	66.5	M	67.5	4
446	104	69.5	66.5	F	64.5	4
447	104	69.5	66.5	F	64.0	4
448	105	69.0	66.5	M	71.0	6
449	105	69.0	66.5	F	68.5	6
450	105	69.0	66.5	F	67.5	6
451	105	69.0	66.5	F	66.0	6
452	105	69.0	66.5	F	63.0	6
453	105	69.0	66.5	F	63.0	6
454	106	69.5	66.0	M	71.0	7
455	106	69.5	66.0	M	71.0	7
456	106	69.5	66.0	M	70.5	7
457	106	69.5	66.0	M	70.5	7
458	106	69.5	66.0	F	66.5	7
459	106	69.5	66.0	F	65.5	7
460	106	69.5	66.0	F	64.5	7
461	107	69.0	66.0	M	73.0	9

462	107	69.0	66.0	M	72.0	9
463	107	69.0	66.0	M	69.0	9
464	107	69.0	66.0	M	69.0	9
465	107	69.0	66.0	F	66.5	9
466	107	69.0	66.0	F	65.5	9
467	107	69.0	66.0	F	65.5	9
468	107	69.0	66.0	F	65.0	9
469	107	69.0	66.0	F	64.0	9
470	108	69.0	65.0	M	70.0	7
471	108	69.0	65.0	M	68.5	7
472	108	69.0	65.0	M	67.0	7
473	108	69.0	65.0	F	65.0	7
474	108	69.0	65.0	F	64.0	7
475	108	69.0	65.0	F	63.5	7
476	108	69.0	65.0	F	61.0	7
477	109	69.5	64.5	M	69.7	7
478	109	69.5	64.5	M	68.0	7
479	109	69.5	64.5	M	60.0	7
480	109	69.5	64.5	F	65.2	7
481	109	69.5	64.5	F	64.5	7
482	109	69.5	64.5	F	63.7	7
483	109	69.5	64.5	F	60.0	7
484	110	69.2	64.0	M	71.7	4
485	110	69.2	64.0	M	66.5	4
486	110	69.2	64.0	F	65.0	4
487	110	69.2	64.0	F	63.5	4
488	112	69.0	63.0	M	69.0	3
489	112	69.0	63.0	F	67.5	3
490	112	69.0	63.0	F	63.5	3
491	113	69.0	63.0	M	72.0	1
492	114	69.0	63.0	M	73.0	6
493	114	69.0	63.0	M	70.0	6
494	114	69.0	63.0	M	70.0	6
495	114	69.0	63.0	M	64.0	6
496	114	69.0	63.0	F	66.0	6
497	114	69.0	63.0	F	62.0	6
498	115	69.0	63.5	M	70.5	7
499	115	69.0	63.5	M	67.0	7
500	115	69.0	63.5	M	66.0	7
501	115	69.0	63.5	F	65.0	7
502	115	69.0	63.5	F	63.0	7
503	115	69.0	63.5	F	62.0	7
504	115	69.0	63.5	F	61.0	7
505	116	69.0	63.5	M	70.5	3
506	116	69.0	63.5	F	63.7	3
507	116	69.0	63.5	F	63.0	3
508	117	69.7	62.0	F	62.5	1
509	118	69.5	62.0	M	73.0	3
510	118	69.5	62.0	M	72.0	3
511	118	69.5	62.0	M	69.0	3

512	119	69.0	62.0	M	73.0	5
513	119	69.0	62.0	M	71.0	5
514	119	69.0	62.0	M	71.0	5
515	119	69.0	62.0	M	69.0	5
516	119	69.0	62.0	F	63.0	5
517	121	69.0	62.5	M	71.0	8
518	121	69.0	62.5	M	70.0	8
519	121	69.0	62.5	M	70.0	8
520	121	69.0	62.5	M	69.0	8
521	121	69.0	62.5	F	63.5	8
522	121	69.0	62.5	F	62.5	8
523	121	69.0	62.5	F	62.5	8
524	121	69.0	62.5	F	62.0	8
525	122	69.0	62.0	M	72.0	4
526	122	69.0	62.0	M	68.0	4
527	122	69.0	62.0	F	66.0	4
528	122	69.0	62.0	F	66.0	4
529	123	69.5	61.0	M	70.0	5
530	123	69.5	61.0	M	69.5	5
531	123	69.5	61.0	M	69.0	5
532	123	69.5	61.0	F	63.0	5
533	123	69.5	61.0	F	62.0	5
534	124	69.0	61.0	M	68.0	9
535	124	69.0	61.0	M	68.0	9
536	124	69.0	61.0	M	67.5	9
537	124	69.0	61.0	M	64.0	9
538	124	69.0	61.0	M	63.0	9
539	124	69.0	61.0	M	63.0	9
540	124	69.0	61.0	F	63.5	9
541	124	69.0	61.0	F	62.0	9
542	124	69.0	61.0	F	62.0	9
543	125	69.0	60.0	M	70.5	3
544	125	69.0	60.0	F	68.0	3
545	125	69.0	60.0	F	62.5	3
546	126	69.0	60.0	M	69.0	4
547	126	69.0	60.0	M	66.0	4
548	126	69.0	60.0	F	61.7	4
549	126	69.0	60.0	F	60.5	4
550	127	69.0	60.5	M	69.5	1
551	128	68.7	70.5	M	71.0	2
552	128	68.7	70.5	F	61.7	2
553	129	68.5	67.0	M	73.0	3
554	129	68.5	67.0	M	71.0	3
555	129	68.5	67.0	F	67.0	3
556	130	68.5	66.5	M	70.0	11
557	130	68.5	66.5	M	69.0	11
558	130	68.5	66.5	M	69.0	11
559	130	68.5	66.5	M	68.7	11
560	130	68.5	66.5	M	68.5	11
561	130	68.5	66.5	M	68.5	11

562	130	68.5	66.5	M	68.0	11
563	130	68.5	66.5	M	68.0	11
564	130	68.5	66.5	M	68.0	11
565	130	68.5	66.5	F	63.2	11
566	131	68.0	65.0	M	67.5	2
567	131	68.0	65.0	M	66.0	2
568	132	68.0	65.5	M	66.0	2
569	132	68.0	65.5	F	64.0	2
570	133	68.0	65.5	M	71.7	7
571	133	68.0	65.5	M	71.5	7
572	133	68.0	65.5	M	70.7	7
573	133	68.0	65.5	M	65.5	7
574	133	68.0	65.5	F	66.5	7
575	133	68.0	65.5	F	65.2	7
576	133	68.0	65.5	F	61.5	7
577	134	68.0	65.0	M	72.0	4
578	134	68.0	65.0	M	72.0	4
579	134	68.0	65.0	F	68.0	4
580	134	68.0	65.0	F	66.0	4
581	135	68.5	65.0	M	69.2	8
582	135	68.5	65.0	M	68.0	8
583	135	68.5	65.0	M	66.0	8
584	135	68.5	65.0	M	66.0	8
585	135	68.5	65.0	F	62.0	8
586	135	68.5	65.0	F	61.5	8
587	135	68.5	65.0	F	61.0	8
588	135	68.5	65.0	F	60.0	8
589	136	68.0	64.0	M	71.0	10
590	136	68.0	64.0	M	68.0	10
591	136	68.0	64.0	M	68.0	10
592	136	68.0	64.0	M	67.0	10
593	136	68.0	64.0	F	65.0	10
594	136	68.0	64.0	F	64.0	10
595	136	68.0	64.0	F	63.0	10
596	136	68.0	64.0	F	63.0	10
597	136	68.0	64.0	F	62.0	10
598	136	68.0	64.0	F	61.0	10
599	137	68.0	64.0	M	66.0	4
600	137	68.0	64.0	M	63.0	4
601	137	68.0	64.0	F	65.5	4
602	137	68.0	64.0	F	62.0	4
603	138	68.0	64.0	M	71.2	5
604	138	68.0	64.0	M	71.2	5
605	138	68.0	64.0	M	69.0	5
606	138	68.0	64.0	M	68.5	5
607	138	68.0	64.0	F	62.5	5
608	139	68.0	64.5	F	62.0	1
609	140	68.0	64.0	M	69.0	10
610	140	68.0	64.0	M	67.0	10
611	140	68.0	64.0	M	66.0	10

612	140	68.0	64.0	F	66.0	10
613	140	68.0	64.0	F	66.0	10
614	140	68.0	64.0	F	65.0	10
615	140	68.0	64.0	F	65.0	10
616	140	68.0	64.0	F	65.0	10
617	140	68.0	64.0	F	64.0	10
618	140	68.0	64.0	F	63.0	10
619	141	68.0	63.0	M	70.5	8
620	141	68.0	63.0	M	70.0	8
621	141	68.0	63.0	M	68.0	8
622	141	68.0	63.0	M	66.0	8
623	141	68.0	63.0	M	66.0	8
624	141	68.0	63.0	F	66.0	8
625	141	68.0	63.0	F	62.0	8
626	141	68.0	63.0	F	61.5	8
627	142	68.5	63.5	M	73.5	4
628	142	68.5	63.5	M	70.0	4
629	142	68.5	63.5	M	69.5	4
630	142	68.5	63.5	F	65.5	4
631	143	68.0	63.0	M	67.0	1
632	144	68.0	63.0	M	70.0	4
633	144	68.0	63.0	M	68.0	4
634	144	68.0	63.0	F	64.5	4
635	144	68.0	63.0	F	64.0	4
636	145	68.0	63.0	M	71.0	8
637	145	68.0	63.0	M	68.0	8
638	145	68.0	63.0	M	66.0	8
639	145	68.0	63.0	M	65.5	8
640	145	68.0	63.0	M	65.0	8
641	145	68.0	63.0	F	63.0	8
642	145	68.0	63.0	F	62.0	8
643	145	68.0	63.0	F	62.0	8
644	146	68.0	63.0	M	67.0	6
645	146	68.0	63.0	M	67.0	6
646	146	68.0	63.0	M	66.0	6
647	146	68.0	63.0	F	64.0	6
648	146	68.0	63.0	F	63.5	6
649	146	68.0	63.0	F	61.0	6
650	147	68.5	63.5	M	68.2	1
651	148	68.0	63.0	M	70.0	1
652	149	68.2	63.5	M	70.0	5
653	149	68.2	63.5	M	69.0	5
654	149	68.2	63.5	M	67.0	5
655	149	68.2	63.5	M	65.5	5
656	149	68.2	63.5	F	64.5	5
657	150	68.0	62.5	M	68.5	1
658	151	68.7	62.0	M	67.7	2
659	151	68.7	62.0	F	61.7	2
660	152	68.0	62.5	M	66.5	1
661	153	68.0	61.0	M	68.5	5

662	153	68.0	61.0	M	68.0	5
663	153	68.0	61.0	M	64.0	5
664	153	68.0	61.0	F	63.5	5
665	153	68.0	61.0	F	63.0	5
666	154	68.0	60.2	M	66.7	1
667	155	68.0	60.0	M	64.0	7
668	155	68.0	60.0	F	61.0	7
669	155	68.0	60.0	F	61.0	7
670	155	68.0	60.0	F	60.0	7
671	155	68.0	60.0	F	60.0	7
672	155	68.0	60.0	F	60.0	7
673	155	68.0	60.0	F	56.0	7
674	156	68.0	60.0	M	67.5	4
675	156	68.0	60.0	M	67.0	4
676	156	68.0	60.0	M	66.5	4
677	156	68.0	60.0	F	60.0	4
678	157	68.5	59.0	M	69.0	1
679	158	68.0	59.0	M	68.0	10
680	158	68.0	59.0	M	65.0	10
681	158	68.0	59.0	M	64.7	10
682	158	68.0	59.0	M	64.0	10
683	158	68.0	59.0	M	64.0	10
684	158	68.0	59.0	M	63.0	10
685	158	68.0	59.0	F	65.0	10
686	158	68.0	59.0	F	65.0	10
687	158	68.0	59.0	F	62.0	10
688	158	68.0	59.0	F	61.0	10
689	159	67.0	66.2	M	72.7	5
690	159	67.0	66.2	M	72.7	5
691	159	67.0	66.2	M	71.5	5
692	159	67.0	66.2	F	65.5	5
693	159	67.0	66.2	F	63.5	5
694	160	67.0	66.5	M	71.0	1
695	162	67.0	65.0	M	69.7	6
696	162	67.0	65.0	M	67.5	6
697	162	67.0	65.0	F	65.5	6
698	162	67.0	65.0	F	65.0	6
699	162	67.0	65.0	F	64.5	6
700	162	67.0	65.0	F	63.5	6
701	163	67.0	65.5	M	70.0	5
702	163	67.0	65.5	M	69.0	5
703	163	67.0	65.5	F	65.5	5
704	163	67.0	65.5	F	65.5	5
705	163	67.0	65.5	F	63.0	5
706	164	67.0	65.5	M	70.0	4
707	164	67.0	65.5	M	67.7	4
708	164	67.0	65.5	F	63.0	4
709	164	67.0	65.5	F	60.0	4
710	165	67.0	65.0	M	65.0	3
711	165	67.0	65.0	F	62.0	3

712	165	67.0	65.0	F	62.0	3
713	166	67.5	65.0	M	71.0	11
714	166	67.5	65.0	M	69.0	11
715	166	67.5	65.0	F	64.0	11
716	166	67.5	65.0	F	64.0	11
717	166	67.5	65.0	F	63.0	11
718	166	67.5	65.0	F	63.0	11
719	166	67.5	65.0	F	63.0	11
720	166	67.5	65.0	F	63.0	11
721	166	67.5	65.0	F	63.0	11
722	166	67.5	65.0	F	62.5	11
723	166	67.5	65.0	F	62.0	11
724	167	67.0	64.0	M	71.5	4
725	167	67.0	64.0	M	70.0	4
726	167	67.0	64.0	M	67.0	4
727	167	67.0	64.0	M	67.0	4
728	168	67.0	63.5	M	71.0	8
729	168	67.0	63.5	M	70.2	8
730	168	67.0	63.5	M	69.2	8
731	168	67.0	63.5	M	68.5	8
732	168	67.0	63.5	M	68.0	8
733	168	67.0	63.5	M	67.0	8
734	168	67.0	63.5	M	65.5	8
735	168	67.0	63.5	F	63.5	8
736	169	67.0	63.0	M	69.0	3
737	169	67.0	63.0	M	68.0	3
738	169	67.0	63.0	F	63.0	3
739	170	67.5	62.0	M	70.0	5
740	170	67.5	62.0	M	69.5	5
741	170	67.5	62.0	M	69.0	5
742	170	67.5	62.0	M	68.5	5
743	170	67.5	62.0	F	66.0	5
744	171	67.0	61.0	M	67.0	1
745	172	66.0	67.0	M	70.5	8
746	172	66.0	67.0	M	70.5	8
747	172	66.0	67.0	M	67.0	8
748	172	66.0	67.0	M	66.0	8
749	172	66.0	67.0	M	66.0	8
750	172	66.0	67.0	F	62.0	8
751	172	66.0	67.0	F	62.0	8
752	172	66.0	67.0	F	61.5	8
753	173	66.0	67.0	M	72.0	9
754	173	66.0	67.0	M	65.0	9
755	173	66.0	67.0	M	65.0	9
756	173	66.0	67.0	F	67.0	9
757	173	66.0	67.0	F	64.0	9
758	173	66.0	67.0	F	64.0	9
759	173	66.0	67.0	F	62.0	9
760	173	66.0	67.0	F	60.0	9
761	173	66.0	67.0	F	60.0	9

762	174	66.0	66.0	M	66.0	5
763	174	66.0	66.0	M	65.0	5
764	174	66.0	66.0	F	67.0	5
765	174	66.0	66.0	F	66.5	5
766	174	66.0	66.0	F	65.5	5
767	175	66.0	66.0	M	72.0	6
768	175	66.0	66.0	M	68.0	6
769	175	66.0	66.0	F	66.0	6
770	175	66.0	66.0	F	65.0	6
771	175	66.0	66.0	F	62.0	6
772	175	66.0	66.0	F	61.0	6
773	176	66.5	65.0	M	68.7	8
774	176	66.5	65.0	M	68.5	8
775	176	66.5	65.0	M	66.5	8
776	176	66.5	65.0	M	64.5	8
777	176	66.5	65.0	F	62.5	8
778	176	66.5	65.0	F	60.5	8
779	176	66.5	65.0	F	60.5	8
780	176	66.5	65.0	F	57.5	8
781	177	66.0	65.5	M	72.0	5
782	177	66.0	65.5	M	71.0	5
783	177	66.0	65.5	M	67.0	5
784	177	66.0	65.5	F	66.0	5
785	177	66.0	65.5	F	65.0	5
786	178	66.0	63.0	M	70.0	1
787	179	66.0	63.5	F	64.5	2
788	179	66.0	63.5	F	62.0	2
789	180	66.5	63.0	M	67.2	6
790	180	66.5	63.0	M	67.0	6
791	180	66.5	63.0	M	65.0	6
792	180	66.5	63.0	F	65.0	6
793	180	66.5	63.0	F	65.0	6
794	180	66.5	63.0	F	63.0	6
795	181	66.5	62.5	M	70.0	7
796	181	66.5	62.5	M	68.0	7
797	181	66.5	62.5	F	63.5	7
798	181	66.5	62.5	F	62.5	7
799	181	66.5	62.5	F	62.5	7
800	181	66.5	62.5	F	62.5	7
801	181	66.5	62.5	F	62.5	7
802	182	66.0	61.5	M	70.0	1
803	183	66.0	60.0	M	68.0	4
804	183	66.0	60.0	M	67.0	4
805	183	66.0	60.0	M	65.0	4
806	183	66.0	60.0	F	60.0	4
807	184	66.0	60.0	M	65.0	1
808	185	66.0	59.0	M	68.0	15
809	185	66.0	59.0	M	67.0	15
810	185	66.0	59.0	M	66.5	15
811	185	66.0	59.0	M	66.0	15

812	185	66.0	59.0	M	65.7	15
813	185	66.0	59.0	M	65.5	15
814	185	66.0	59.0	M	65.0	15
815	185	66.0	59.0	F	65.0	15
816	185	66.0	59.0	F	64.0	15
817	185	66.0	59.0	F	63.0	15
818	185	66.0	59.0	F	62.0	15
819	185	66.0	59.0	F	61.0	15
820	185	66.0	59.0	F	60.0	15
821	185	66.0	59.0	F	58.0	15
822	185	66.0	59.0	F	57.0	15
823	186	65.0	67.0	M	66.5	4
824	186	65.0	67.0	M	66.0	4
825	186	65.0	67.0	M	66.0	4
826	186	65.0	67.0	F	65.0	4
827	187	65.0	67.0	F	63.0	1
828	188	65.0	66.0	M	63.0	4
829	188	65.0	66.0	F	63.0	4
830	188	65.0	66.0	F	63.0	4
831	188	65.0	66.0	F	60.0	4
832	190	65.0	65.0	M	69.0	9
833	190	65.0	65.0	M	68.0	9
834	190	65.0	65.0	M	68.0	9
835	190	65.0	65.0	F	65.0	9
836	190	65.0	65.0	F	65.0	9
837	190	65.0	65.0	F	62.0	9
838	190	65.0	65.0	F	62.0	9
839	190	65.0	65.0	F	61.0	9
840	190	65.0	65.0	F	59.0	9
841	191	65.0	65.5	M	70.7	2
842	191	65.0	65.5	F	65.5	2
843	192	65.0	65.0	M	69.2	6
844	192	65.0	65.0	M	69.0	6
845	192	65.0	65.0	M	68.0	6
846	192	65.0	65.0	M	67.7	6
847	192	65.0	65.0	F	64.5	6
848	192	65.0	65.0	F	60.5	6
849	193	65.0	64.0	M	67.0	6
850	193	65.0	64.0	M	67.0	6
851	193	65.0	64.0	F	64.0	6
852	193	65.0	64.0	F	64.0	6
853	193	65.0	64.0	F	62.5	6
854	193	65.0	64.0	F	60.5	6
855	194	65.0	63.0	M	70.0	2
856	194	65.0	63.0	F	63.0	2
857	195	65.0	63.0	M	66.0	3
858	195	65.0	63.0	M	66.0	3
859	195	65.0	63.0	F	63.0	3
860	196	65.5	63.0	M	71.0	4
861	196	65.5	63.0	M	71.0	4

862	196	65.5	63.0	M	69.0	4
863	196	65.5	63.0	F	63.5	4
864	197	65.5	60.0	M	68.0	5
865	197	65.5	60.0	M	68.0	5
866	197	65.5	60.0	M	67.0	5
867	197	65.5	60.0	M	67.0	5
868	197	65.5	60.0	F	62.0	5
869	198	64.0	64.0	M	71.5	7
870	198	64.0	64.0	M	68.0	7
871	198	64.0	64.0	F	65.5	7
872	198	64.0	64.0	F	64.0	7
873	198	64.0	64.0	F	62.0	7
874	198	64.0	64.0	F	62.0	7
875	198	64.0	64.0	F	61.0	7
876	199	64.0	64.0	M	70.5	7
877	199	64.0	64.0	M	68.0	7
878	199	64.0	64.0	F	67.0	7
879	199	64.0	64.0	F	65.0	7
880	199	64.0	64.0	F	64.0	7
881	199	64.0	64.0	F	64.0	7
882	199	64.0	64.0	F	60.0	7
883	200	64.0	63.0	M	64.5	1
884	201	64.0	60.0	M	66.0	2
885	201	64.0	60.0	F	60.0	2
886	203	62.0	66.0	M	64.0	3
887	203	62.0	66.0	F	62.0	3
888	203	62.0	66.0	F	61.0	3
889	204	62.5	63.0	M	66.5	2
890	204	62.5	63.0	F	57.0	2
891	136A	68.5	65.0	M	72.0	8
892	136A	68.5	65.0	M	70.5	8
893	136A	68.5	65.0	M	68.7	8
894	136A	68.5	65.0	M	68.5	8
895	136A	68.5	65.0	M	67.7	8
896	136A	68.5	65.0	F	64.0	8
897	136A	68.5	65.0	F	63.5	8
898	136A	68.5	65.0	F	63.0	8

```
> getwd()
```

```
[1] "/Users/minshu"
```

```
> read.csv("Galton.csv")
```

	Family	Father	Mother	Gender	Height	Kids
1	1	78.5	67.0	M	73.2	4
2	1	78.5	67.0	F	69.2	4
3	1	78.5	67.0	F	69.0	4
4	1	78.5	67.0	F	69.0	4
5	2	75.5	66.5	M	73.5	4
6	2	75.5	66.5	M	72.5	4
7	2	75.5	66.5	F	65.5	4
8	2	75.5	66.5	F	65.5	4
9	3	75.0	64.0	M	71.0	2

10	3	75.0	64.0	F	68.0	2
11	4	75.0	64.0	M	70.5	5
12	4	75.0	64.0	M	68.5	5
13	4	75.0	64.0	F	67.0	5
14	4	75.0	64.0	F	64.5	5
15	4	75.0	64.0	F	63.0	5
16	5	75.0	58.5	M	72.0	6
17	5	75.0	58.5	M	69.0	6
18	5	75.0	58.5	M	68.0	6
19	5	75.0	58.5	F	66.5	6
20	5	75.0	58.5	F	62.5	6
21	5	75.0	58.5	F	62.5	6
22	6	74.0	68.0	F	69.5	1
23	7	74.0	68.0	M	76.5	6
24	7	74.0	68.0	M	74.0	6
25	7	74.0	68.0	M	73.0	6
26	7	74.0	68.0	M	73.0	6
27	7	74.0	68.0	F	70.5	6
28	7	74.0	68.0	F	64.0	6
29	8	74.0	66.5	F	70.5	3
30	8	74.0	66.5	F	68.0	3
31	8	74.0	66.5	F	66.0	3
32	9	74.5	66.0	F	66.0	1
33	10	74.0	65.5	F	65.5	1
34	11	74.0	62.0	M	74.0	8
35	11	74.0	62.0	M	70.0	8
36	11	74.0	62.0	F	68.0	8
37	11	74.0	62.0	F	67.0	8
38	11	74.0	62.0	F	67.0	8
39	11	74.0	62.0	F	66.0	8
40	11	74.0	62.0	F	63.5	8
41	11	74.0	62.0	F	63.0	8
42	12	74.0	61.0	F	65.0	1
43	14	73.0	67.0	M	68.0	2
44	14	73.0	67.0	M	67.0	2
45	15	73.0	66.5	M	71.0	3
46	15	73.0	66.5	M	70.5	3
47	15	73.0	66.5	F	66.7	3
48	16	73.0	65.0	M	72.0	9
49	16	73.0	65.0	M	70.5	9
50	16	73.0	65.0	M	70.2	9
51	16	73.0	65.0	M	70.2	9
52	16	73.0	65.0	M	69.2	9
53	16	73.0	65.0	F	68.7	9
54	16	73.0	65.0	F	66.5	9
55	16	73.0	65.0	F	64.5	9
56	16	73.0	65.0	F	63.5	9
57	17	73.0	64.5	M	74.0	6
58	17	73.0	64.5	M	73.0	6
59	17	73.0	64.5	M	71.5	6

60	17	73.0	64.5	M	62.5	6
61	17	73.0	64.5	F	66.5	6
62	17	73.0	64.5	F	62.3	6
63	18	73.0	64.0	F	66.0	3
64	18	73.0	64.0	F	64.5	3
65	18	73.0	64.0	F	64.0	3
66	19	73.2	63.0	F	62.7	1
67	20	72.7	69.0	M	73.2	8
68	20	72.7	69.0	M	73.0	8
69	20	72.7	69.0	M	72.7	8
70	20	72.7	69.0	F	70.0	8
71	20	72.7	69.0	F	69.0	8
72	20	72.7	69.0	F	68.5	8
73	20	72.7	69.0	F	68.0	8
74	20	72.7	69.0	F	66.0	8
75	21	72.0	68.0	M	73.0	3
76	21	72.0	68.0	F	68.5	3
77	21	72.0	68.0	F	68.0	3
78	22	72.0	67.0	M	73.0	3
79	22	72.0	67.0	M	71.0	3
80	22	72.0	67.0	F	67.0	3
81	23	72.0	65.0	M	74.2	7
82	23	72.0	65.0	M	70.5	7
83	23	72.0	65.0	M	69.5	7
84	23	72.0	65.0	F	66.0	7
85	23	72.0	65.0	F	65.5	7
86	23	72.0	65.0	F	65.0	7
87	23	72.0	65.0	F	65.0	7
88	24	72.0	65.5	F	65.5	1
89	25	72.0	64.0	F	66.0	2
90	25	72.0	64.0	F	63.0	2
91	26	72.0	63.0	M	70.5	5
92	26	72.0	63.0	M	70.5	5
93	26	72.0	63.0	M	69.0	5
94	26	72.0	63.0	F	65.0	5
95	26	72.0	63.0	F	63.0	5
96	27	72.0	63.0	M	69.0	3
97	27	72.0	63.0	M	67.0	3
98	27	72.0	63.0	F	63.0	3
99	28	72.0	63.0	M	73.0	6
100	28	72.0	63.0	M	67.0	6
101	28	72.0	63.0	F	70.5	6
102	28	72.0	63.0	F	70.0	6
103	28	72.0	63.0	F	66.5	6
104	28	72.0	63.0	F	63.0	6
105	29	72.5	63.5	F	67.5	3
106	29	72.5	63.5	F	67.2	3
107	29	72.5	63.5	F	66.7	3
108	30	72.0	62.0	F	64.0	1
109	31	72.5	62.0	M	71.0	6

110	31	72.5	62.0	M	70.0	6
111	31	72.5	62.0	M	70.0	6
112	31	72.5	62.0	F	66.0	6
113	31	72.5	62.0	F	65.0	6
114	31	72.5	62.0	F	65.0	6
115	32	72.0	62.0	M	74.0	5
116	32	72.0	62.0	M	72.0	5
117	32	72.0	62.0	M	69.0	5
118	32	72.0	62.0	F	67.5	5
119	32	72.0	62.0	F	63.5	5
120	33	72.0	62.0	M	72.0	5
121	33	72.0	62.0	M	71.5	5
122	33	72.0	62.0	M	71.5	5
123	33	72.0	62.0	M	70.0	5
124	33	72.0	62.0	F	68.0	5
125	34	72.0	61.0	F	65.7	1
126	35	71.0	69.0	M	78.0	5
127	35	71.0	69.0	M	74.0	5
128	35	71.0	69.0	M	73.0	5
129	35	71.0	69.0	M	72.0	5
130	35	71.0	69.0	F	67.0	5
131	36	71.0	67.0	M	73.2	4
132	36	71.0	67.0	M	73.0	4
133	36	71.0	67.0	M	69.0	4
134	36	71.0	67.0	F	67.0	4
135	37	71.0	66.0	M	70.0	4
136	37	71.0	66.0	F	67.0	4
137	37	71.0	66.0	F	67.0	4
138	37	71.0	66.0	F	66.5	4
139	38	71.0	66.0	M	70.0	6
140	38	71.0	66.0	M	69.0	6
141	38	71.0	66.0	M	68.5	6
142	38	71.0	66.0	F	66.0	6
143	38	71.0	66.0	F	64.5	6
144	38	71.0	66.0	F	63.0	6
145	39	71.0	66.0	M	71.0	2
146	39	71.0	66.0	F	67.0	2
147	40	71.0	66.0	M	76.0	5
148	40	71.0	66.0	M	72.0	5
149	40	71.0	66.0	M	71.0	5
150	40	71.0	66.0	M	66.0	5
151	40	71.0	66.0	F	66.0	5
152	41	71.7	65.5	M	70.5	1
153	42	71.0	65.5	M	72.0	6
154	42	71.0	65.5	M	72.0	6
155	42	71.0	65.5	M	71.0	6
156	42	71.0	65.5	M	69.0	6
157	42	71.0	65.5	F	66.0	6
158	42	71.0	65.5	F	65.0	6
159	43	71.5	65.5	M	73.0	2

160	43	71.5	65.5	F	65.2	2
161	44	71.5	65.0	M	68.5	2
162	44	71.5	65.0	M	67.7	2
163	45	71.0	65.0	M	68.0	3
164	45	71.0	65.0	M	68.0	3
165	45	71.0	65.0	F	62.0	3
166	46	71.0	64.0	F	68.0	8
167	46	71.0	64.0	F	68.0	8
168	46	71.0	64.0	F	67.5	8
169	46	71.0	64.0	F	66.5	8
170	46	71.0	64.0	F	66.5	8
171	46	71.0	64.0	F	66.0	8
172	46	71.0	64.0	F	65.5	8
173	46	71.0	64.0	F	65.0	8
174	47	71.7	64.5	M	72.0	4
175	47	71.7	64.5	M	71.0	4
176	47	71.7	64.5	M	70.5	4
177	47	71.7	64.5	F	67.0	4
178	48	71.0	64.0	M	68.0	3
179	48	71.0	64.0	M	68.0	3
180	48	71.0	64.0	M	68.0	3
181	49	71.5	64.5	M	72.0	7
182	49	71.5	64.5	M	71.0	7
183	49	71.5	64.5	M	70.0	7
184	49	71.5	64.5	F	66.0	7
185	49	71.5	64.5	F	64.5	7
186	49	71.5	64.5	F	64.5	7
187	49	71.5	64.5	F	62.0	7
188	51	71.2	63.0	F	67.5	2
189	51	71.2	63.0	F	64.5	2
190	52	71.0	63.5	M	71.0	5
191	52	71.0	63.5	M	67.0	5
192	52	71.0	63.5	F	66.0	5
193	52	71.0	63.5	F	65.0	5
194	52	71.0	63.5	F	63.5	5
195	53	71.0	63.0	M	71.0	9
196	53	71.0	63.0	M	70.0	9
197	53	71.0	63.0	M	70.0	9
198	53	71.0	63.0	M	64.0	9
199	53	71.0	63.0	F	65.0	9
200	53	71.0	63.0	F	65.0	9
201	53	71.0	63.0	F	64.0	9
202	53	71.0	63.0	F	63.0	9
203	53	71.0	63.0	F	63.0	9
204	54	71.0	63.0	M	71.0	4
205	54	71.0	63.0	M	71.0	4
206	54	71.0	63.0	M	70.0	4
207	54	71.0	63.0	F	63.5	4
208	55	71.0	62.0	M	71.0	5
209	55	71.0	62.0	M	70.0	5

210	55	71.0	62.0	F	64.5	5
211	55	71.0	62.0	F	62.5	5
212	55	71.0	62.0	F	61.5	5
213	56	71.0	62.0	M	72.0	5
214	56	71.0	62.0	M	70.5	5
215	56	71.0	62.0	M	70.5	5
216	56	71.0	62.0	F	64.5	5
217	56	71.0	62.0	F	60.0	5
218	57	71.0	62.5	M	70.0	5
219	57	71.0	62.5	F	64.0	5
220	57	71.0	62.5	F	64.0	5
221	57	71.0	62.5	F	64.0	5
222	57	71.0	62.5	F	62.5	5
223	58	71.0	62.0	M	70.5	7
224	58	71.0	62.0	M	70.0	7
225	58	71.0	62.0	M	69.0	7
226	58	71.0	62.0	M	69.0	7
227	58	71.0	62.0	M	66.0	7
228	58	71.0	62.0	F	64.5	7
229	58	71.0	62.0	F	64.0	7
230	59	71.0	61.0	F	62.0	1
231	60	71.0	58.0	M	71.5	2
232	60	71.0	58.0	M	69.0	2
233	61	70.0	69.0	M	71.0	4
234	61	70.0	69.0	M	70.0	4
235	61	70.0	69.0	M	69.0	4
236	61	70.0	69.0	F	69.0	4
237	62	70.0	69.0	M	70.0	6
238	62	70.0	69.0	M	68.7	6
239	62	70.0	69.0	F	68.0	6
240	62	70.0	69.0	F	66.0	6
241	62	70.0	69.0	F	64.0	6
242	62	70.0	69.0	F	62.0	6
243	63	70.0	68.0	M	75.0	1
244	64	70.0	67.0	M	70.0	5
245	64	70.0	67.0	M	69.0	5
246	64	70.0	67.0	F	66.0	5
247	64	70.0	67.0	F	64.0	5
248	64	70.0	67.0	F	60.0	5
249	65	70.0	67.0	F	67.5	1
250	66	70.0	66.5	M	73.0	11
251	66	70.0	66.5	M	72.0	11
252	66	70.0	66.5	M	72.0	11
253	66	70.0	66.5	M	66.5	11
254	66	70.0	66.5	F	69.2	11
255	66	70.0	66.5	F	67.2	11
256	66	70.0	66.5	F	66.5	11
257	66	70.0	66.5	F	66.0	11
258	66	70.0	66.5	F	66.0	11
259	66	70.0	66.5	F	64.2	11

260	66	70.0	66.5	F	63.7	11
261	67	70.5	65.0	M	72.0	4
262	67	70.5	65.0	M	70.2	4
263	67	70.5	65.0	M	69.0	4
264	67	70.5	65.0	M	68.5	4
265	68	70.5	65.0	F	68.0	5
266	68	70.5	65.0	F	65.0	5
267	68	70.5	65.0	F	61.5	5
268	68	70.5	65.0	F	61.0	5
269	68	70.5	65.0	F	61.0	5
270	69	70.0	65.0	M	73.0	8
271	69	70.0	65.0	M	72.0	8
272	69	70.0	65.0	M	70.5	8
273	69	70.0	65.0	M	65.0	8
274	69	70.0	65.0	M	65.0	8
275	69	70.0	65.0	F	64.5	8
276	69	70.0	65.0	F	63.0	8
277	69	70.0	65.0	F	62.0	8
278	70	70.0	65.0	M	67.0	5
279	70	70.0	65.0	M	65.0	5
280	70	70.0	65.0	F	64.5	5
281	70	70.0	65.0	F	62.5	5
282	70	70.0	65.0	F	62.5	5
283	71	70.0	65.0	M	70.0	6
284	71	70.0	65.0	M	70.0	6
285	71	70.0	65.0	F	67.0	6
286	71	70.0	65.0	F	65.0	6
287	71	70.0	65.0	F	65.0	6
288	71	70.0	65.0	F	63.0	6
289	72	70.0	65.0	M	79.0	7
290	72	70.0	65.0	M	75.0	7
291	72	70.0	65.0	M	71.0	7
292	72	70.0	65.0	F	69.0	7
293	72	70.0	65.0	F	67.0	7
294	72	70.0	65.0	F	65.7	7
295	72	70.0	65.0	F	62.0	7
296	73	70.0	65.0	M	73.0	3
297	73	70.0	65.0	M	72.5	3
298	73	70.0	65.0	F	65.0	3
299	74	70.0	65.0	M	69.0	2
300	74	70.0	65.0	M	69.0	2
301	75	70.0	64.7	M	72.0	7
302	75	70.0	64.7	M	70.0	7
303	75	70.0	64.7	M	68.7	7
304	75	70.0	64.7	F	66.5	7
305	75	70.0	64.7	F	65.5	7
306	75	70.0	64.7	F	64.7	7
307	75	70.0	64.7	F	64.5	7
308	76	70.0	64.0	M	70.7	7
309	76	70.0	64.0	M	70.0	7

310	76	70.0	64.0	M	68.0	7
311	76	70.0	64.0	M	67.0	7
312	76	70.0	64.0	M	66.0	7
313	76	70.0	64.0	M	65.0	7
314	76	70.0	64.0	F	67.0	7
315	77	70.0	64.0	M	70.0	4
316	77	70.0	64.0	M	68.0	4
317	77	70.0	64.0	M	66.7	4
318	77	70.0	64.0	F	65.5	4
319	78	70.0	64.2	M	72.0	5
320	78	70.0	64.2	M	70.0	5
321	78	70.0	64.2	F	62.5	5
322	78	70.0	64.2	F	61.2	5
323	78	70.0	64.2	F	60.1	5
324	79	70.5	64.0	M	74.0	8
325	79	70.5	64.0	M	69.5	8
326	79	70.5	64.0	M	69.0	8
327	79	70.5	64.0	M	68.0	8
328	79	70.5	64.0	M	68.0	8
329	79	70.5	64.0	M	68.0	8
330	79	70.5	64.0	F	65.5	8
331	79	70.5	64.0	F	65.0	8
332	80	70.5	64.5	F	60.0	1
333	81	70.0	64.0	M	68.0	4
334	81	70.0	64.0	F	65.0	4
335	81	70.0	64.0	F	64.0	4
336	81	70.0	64.0	F	62.0	4
337	82	70.0	64.0	M	71.0	9
338	82	70.0	64.0	M	70.0	9
339	82	70.0	64.0	M	70.0	9
340	82	70.0	64.0	M	70.0	9
341	82	70.0	64.0	M	69.5	9
342	82	70.0	64.0	M	68.5	9
343	82	70.0	64.0	F	69.0	9
344	82	70.0	64.0	F	65.0	9
345	82	70.0	64.0	F	64.0	9
346	83	70.0	63.7	M	70.0	8
347	83	70.0	63.7	M	67.0	8
348	83	70.0	63.7	M	65.5	8
349	83	70.0	63.7	F	63.7	8
350	83	70.0	63.7	F	63.2	8
351	83	70.0	63.7	F	62.5	8
352	83	70.0	63.7	F	62.2	8
353	83	70.0	63.7	F	61.0	8
354	85	70.5	63.0	M	72.5	5
355	85	70.5	63.0	M	69.0	5
356	85	70.5	63.0	M	67.0	5
357	85	70.5	63.0	F	64.5	5
358	85	70.5	63.0	F	64.0	5
359	86	70.0	63.5	M	71.0	4

360	86	70.0	63.5	M	67.5	4
361	86	70.0	63.5	F	67.5	4
362	86	70.0	63.5	F	63.5	4
363	87	70.0	63.0	M	68.0	4
364	87	70.0	63.0	M	67.0	4
365	87	70.0	63.0	F	63.7	4
366	87	70.0	63.0	F	62.0	4
367	88	70.0	63.0	M	70.0	4
368	88	70.0	63.0	M	66.5	4
369	88	70.0	63.0	F	62.0	4
370	88	70.0	63.0	F	61.0	4
371	89	70.5	62.0	M	72.0	8
372	89	70.5	62.0	M	70.0	8
373	89	70.5	62.0	M	69.5	8
374	89	70.5	62.0	M	69.5	8
375	89	70.5	62.0	M	68.0	8
376	89	70.5	62.0	F	65.0	8
377	89	70.5	62.0	F	64.0	8
378	89	70.5	62.0	F	63.0	8
379	90	70.3	62.7	M	70.7	7
380	90	70.3	62.7	M	69.7	7
381	90	70.3	62.7	M	69.2	7
382	90	70.3	62.7	M	65.2	7
383	90	70.3	62.7	F	64.0	7
384	90	70.3	62.7	F	63.5	7
385	90	70.3	62.7	F	63.2	7
386	91	70.5	62.0	M	72.0	3
387	91	70.5	62.0	M	72.0	3
388	91	70.5	62.0	F	60.0	3
389	92	70.0	61.0	M	71.2	2
390	92	70.0	61.0	M	67.0	2
391	93	70.0	60.0	M	67.0	4
392	93	70.0	60.0	M	64.5	4
393	93	70.0	60.0	F	65.0	4
394	93	70.0	60.0	F	63.0	4
395	94	70.0	60.0	F	65.0	2
396	94	70.0	60.0	F	65.0	2
397	95	70.0	58.5	M	71.5	3
398	95	70.0	58.5	M	64.5	3
399	95	70.0	58.5	F	63.0	3
400	96	70.0	58.0	M	72.0	5
401	96	70.0	58.0	M	66.0	5
402	96	70.0	58.0	F	66.0	5
403	96	70.0	58.0	F	65.0	5
404	96	70.0	58.0	F	63.0	5
405	97	69.0	68.5	M	75.0	10
406	97	69.0	68.5	M	71.0	10
407	97	69.0	68.5	M	70.0	10
408	97	69.0	68.5	F	66.0	10
409	97	69.0	68.5	F	66.0	10

410	97	69.0	68.5	F	65.5	10
411	97	69.0	68.5	F	65.0	10
412	97	69.0	68.5	F	65.0	10
413	97	69.0	68.5	F	64.0	10
414	97	69.0	68.5	F	64.0	10
415	98	69.0	67.0	F	64.0	1
416	99	69.0	66.0	M	73.0	8
417	99	69.0	66.0	M	72.0	8
418	99	69.0	66.0	M	71.7	8
419	99	69.0	66.0	M	71.5	8
420	99	69.0	66.0	F	65.5	8
421	99	69.0	66.0	F	65.0	8
422	99	69.0	66.0	F	62.7	8
423	99	69.0	66.0	F	62.5	8
424	100	69.0	66.0	M	71.2	3
425	100	69.0	66.0	M	71.0	3
426	100	69.0	66.0	M	70.0	3
427	101	69.0	66.7	M	75.0	6
428	101	69.0	66.7	M	74.0	6
429	101	69.0	66.7	M	72.0	6
430	101	69.0	66.7	M	68.5	6
431	101	69.0	66.7	M	67.0	6
432	101	69.0	66.7	M	66.0	6
433	102	69.0	66.0	M	70.0	6
434	102	69.0	66.0	M	68.5	6
435	102	69.0	66.0	M	68.0	6
436	102	69.0	66.0	F	65.0	6
437	102	69.0	66.0	F	63.0	6
438	102	69.0	66.0	F	62.5	6
439	103	69.0	66.5	M	73.0	5
440	103	69.0	66.5	M	71.0	5
441	103	69.0	66.5	M	70.5	5
442	103	69.0	66.5	M	70.5	5
443	103	69.0	66.5	F	61.0	5
444	104	69.5	66.5	M	70.5	4
445	104	69.5	66.5	M	67.5	4
446	104	69.5	66.5	F	64.5	4
447	104	69.5	66.5	F	64.0	4
448	105	69.0	66.5	M	71.0	6
449	105	69.0	66.5	F	68.5	6
450	105	69.0	66.5	F	67.5	6
451	105	69.0	66.5	F	66.0	6
452	105	69.0	66.5	F	63.0	6
453	105	69.0	66.5	F	63.0	6
454	106	69.5	66.0	M	71.0	7
455	106	69.5	66.0	M	71.0	7
456	106	69.5	66.0	M	70.5	7
457	106	69.5	66.0	M	70.5	7
458	106	69.5	66.0	F	66.5	7
459	106	69.5	66.0	F	65.5	7

460	106	69.5	66.0	F	64.5	7
461	107	69.0	66.0	M	73.0	9
462	107	69.0	66.0	M	72.0	9
463	107	69.0	66.0	M	69.0	9
464	107	69.0	66.0	M	69.0	9
465	107	69.0	66.0	F	66.5	9
466	107	69.0	66.0	F	65.5	9
467	107	69.0	66.0	F	65.5	9
468	107	69.0	66.0	F	65.0	9
469	107	69.0	66.0	F	64.0	9
470	108	69.0	65.0	M	70.0	7
471	108	69.0	65.0	M	68.5	7
472	108	69.0	65.0	M	67.0	7
473	108	69.0	65.0	F	65.0	7
474	108	69.0	65.0	F	64.0	7
475	108	69.0	65.0	F	63.5	7
476	108	69.0	65.0	F	61.0	7
477	109	69.5	64.5	M	69.7	7
478	109	69.5	64.5	M	68.0	7
479	109	69.5	64.5	M	60.0	7
480	109	69.5	64.5	F	65.2	7
481	109	69.5	64.5	F	64.5	7
482	109	69.5	64.5	F	63.7	7
483	109	69.5	64.5	F	60.0	7
484	110	69.2	64.0	M	71.7	4
485	110	69.2	64.0	M	66.5	4
486	110	69.2	64.0	F	65.0	4
487	110	69.2	64.0	F	63.5	4
488	112	69.0	63.0	M	69.0	3
489	112	69.0	63.0	F	67.5	3
490	112	69.0	63.0	F	63.5	3
491	113	69.0	63.0	M	72.0	1
492	114	69.0	63.0	M	73.0	6
493	114	69.0	63.0	M	70.0	6
494	114	69.0	63.0	M	70.0	6
495	114	69.0	63.0	M	64.0	6
496	114	69.0	63.0	F	66.0	6
497	114	69.0	63.0	F	62.0	6
498	115	69.0	63.5	M	70.5	7
499	115	69.0	63.5	M	67.0	7
500	115	69.0	63.5	M	66.0	7
501	115	69.0	63.5	F	65.0	7
502	115	69.0	63.5	F	63.0	7
503	115	69.0	63.5	F	62.0	7
504	115	69.0	63.5	F	61.0	7
505	116	69.0	63.5	M	70.5	3
506	116	69.0	63.5	F	63.7	3
507	116	69.0	63.5	F	63.0	3
508	117	69.7	62.0	F	62.5	1
509	118	69.5	62.0	M	73.0	3

510	118	69.5	62.0	M	72.0	3
511	118	69.5	62.0	M	69.0	3
512	119	69.0	62.0	M	73.0	5
513	119	69.0	62.0	M	71.0	5
514	119	69.0	62.0	M	71.0	5
515	119	69.0	62.0	M	69.0	5
516	119	69.0	62.0	F	63.0	5
517	121	69.0	62.5	M	71.0	8
518	121	69.0	62.5	M	70.0	8
519	121	69.0	62.5	M	70.0	8
520	121	69.0	62.5	M	69.0	8
521	121	69.0	62.5	F	63.5	8
522	121	69.0	62.5	F	62.5	8
523	121	69.0	62.5	F	62.5	8
524	121	69.0	62.5	F	62.0	8
525	122	69.0	62.0	M	72.0	4
526	122	69.0	62.0	M	68.0	4
527	122	69.0	62.0	F	66.0	4
528	122	69.0	62.0	F	66.0	4
529	123	69.5	61.0	M	70.0	5
530	123	69.5	61.0	M	69.5	5
531	123	69.5	61.0	M	69.0	5
532	123	69.5	61.0	F	63.0	5
533	123	69.5	61.0	F	62.0	5
534	124	69.0	61.0	M	68.0	9
535	124	69.0	61.0	M	68.0	9
536	124	69.0	61.0	M	67.5	9
537	124	69.0	61.0	M	64.0	9
538	124	69.0	61.0	M	63.0	9
539	124	69.0	61.0	M	63.0	9
540	124	69.0	61.0	F	63.5	9
541	124	69.0	61.0	F	62.0	9
542	124	69.0	61.0	F	62.0	9
543	125	69.0	60.0	M	70.5	3
544	125	69.0	60.0	F	68.0	3
545	125	69.0	60.0	F	62.5	3
546	126	69.0	60.0	M	69.0	4
547	126	69.0	60.0	M	66.0	4
548	126	69.0	60.0	F	61.7	4
549	126	69.0	60.0	F	60.5	4
550	127	69.0	60.5	M	69.5	1
551	128	68.7	70.5	M	71.0	2
552	128	68.7	70.5	F	61.7	2
553	129	68.5	67.0	M	73.0	3
554	129	68.5	67.0	M	71.0	3
555	129	68.5	67.0	F	67.0	3
556	130	68.5	66.5	M	70.0	11
557	130	68.5	66.5	M	69.0	11
558	130	68.5	66.5	M	69.0	11
559	130	68.5	66.5	M	68.7	11

560	130	68.5	66.5	M	68.5	11
561	130	68.5	66.5	M	68.5	11
562	130	68.5	66.5	M	68.0	11
563	130	68.5	66.5	M	68.0	11
564	130	68.5	66.5	M	68.0	11
565	130	68.5	66.5	F	63.2	11
566	131	68.0	65.0	M	67.5	2
567	131	68.0	65.0	M	66.0	2
568	132	68.0	65.5	M	66.0	2
569	132	68.0	65.5	F	64.0	2
570	133	68.0	65.5	M	71.7	7
571	133	68.0	65.5	M	71.5	7
572	133	68.0	65.5	M	70.7	7
573	133	68.0	65.5	M	65.5	7
574	133	68.0	65.5	F	66.5	7
575	133	68.0	65.5	F	65.2	7
576	133	68.0	65.5	F	61.5	7
577	134	68.0	65.0	M	72.0	4
578	134	68.0	65.0	M	72.0	4
579	134	68.0	65.0	F	68.0	4
580	134	68.0	65.0	F	66.0	4
581	135	68.5	65.0	M	69.2	8
582	135	68.5	65.0	M	68.0	8
583	135	68.5	65.0	M	66.0	8
584	135	68.5	65.0	M	66.0	8
585	135	68.5	65.0	F	62.0	8
586	135	68.5	65.0	F	61.5	8
587	135	68.5	65.0	F	61.0	8
588	135	68.5	65.0	F	60.0	8
589	136	68.0	64.0	M	71.0	10
590	136	68.0	64.0	M	68.0	10
591	136	68.0	64.0	M	68.0	10
592	136	68.0	64.0	M	67.0	10
593	136	68.0	64.0	F	65.0	10
594	136	68.0	64.0	F	64.0	10
595	136	68.0	64.0	F	63.0	10
596	136	68.0	64.0	F	63.0	10
597	136	68.0	64.0	F	62.0	10
598	136	68.0	64.0	F	61.0	10
599	137	68.0	64.0	M	66.0	4
600	137	68.0	64.0	M	63.0	4
601	137	68.0	64.0	F	65.5	4
602	137	68.0	64.0	F	62.0	4
603	138	68.0	64.0	M	71.2	5
604	138	68.0	64.0	M	71.2	5
605	138	68.0	64.0	M	69.0	5
606	138	68.0	64.0	M	68.5	5
607	138	68.0	64.0	F	62.5	5
608	139	68.0	64.5	F	62.0	1
609	140	68.0	64.0	M	69.0	10

610	140	68.0	64.0	M	67.0	10
611	140	68.0	64.0	M	66.0	10
612	140	68.0	64.0	F	66.0	10
613	140	68.0	64.0	F	66.0	10
614	140	68.0	64.0	F	65.0	10
615	140	68.0	64.0	F	65.0	10
616	140	68.0	64.0	F	65.0	10
617	140	68.0	64.0	F	64.0	10
618	140	68.0	64.0	F	63.0	10
619	141	68.0	63.0	M	70.5	8
620	141	68.0	63.0	M	70.0	8
621	141	68.0	63.0	M	68.0	8
622	141	68.0	63.0	M	66.0	8
623	141	68.0	63.0	M	66.0	8
624	141	68.0	63.0	F	66.0	8
625	141	68.0	63.0	F	62.0	8
626	141	68.0	63.0	F	61.5	8
627	142	68.5	63.5	M	73.5	4
628	142	68.5	63.5	M	70.0	4
629	142	68.5	63.5	M	69.5	4
630	142	68.5	63.5	F	65.5	4
631	143	68.0	63.0	M	67.0	1
632	144	68.0	63.0	M	70.0	4
633	144	68.0	63.0	M	68.0	4
634	144	68.0	63.0	F	64.5	4
635	144	68.0	63.0	F	64.0	4
636	145	68.0	63.0	M	71.0	8
637	145	68.0	63.0	M	68.0	8
638	145	68.0	63.0	M	66.0	8
639	145	68.0	63.0	M	65.5	8
640	145	68.0	63.0	M	65.0	8
641	145	68.0	63.0	F	63.0	8
642	145	68.0	63.0	F	62.0	8
643	145	68.0	63.0	F	62.0	8
644	146	68.0	63.0	M	67.0	6
645	146	68.0	63.0	M	67.0	6
646	146	68.0	63.0	M	66.0	6
647	146	68.0	63.0	F	64.0	6
648	146	68.0	63.0	F	63.5	6
649	146	68.0	63.0	F	61.0	6
650	147	68.5	63.5	M	68.2	1
651	148	68.0	63.0	M	70.0	1
652	149	68.2	63.5	M	70.0	5
653	149	68.2	63.5	M	69.0	5
654	149	68.2	63.5	M	67.0	5
655	149	68.2	63.5	M	65.5	5
656	149	68.2	63.5	F	64.5	5
657	150	68.0	62.5	M	68.5	1
658	151	68.7	62.0	M	67.7	2
659	151	68.7	62.0	F	61.7	2

660	152	68.0	62.5	M	66.5	1
661	153	68.0	61.0	M	68.5	5
662	153	68.0	61.0	M	68.0	5
663	153	68.0	61.0	M	64.0	5
664	153	68.0	61.0	F	63.5	5
665	153	68.0	61.0	F	63.0	5
666	154	68.0	60.2	M	66.7	1
667	155	68.0	60.0	M	64.0	7
668	155	68.0	60.0	F	61.0	7
669	155	68.0	60.0	F	61.0	7
670	155	68.0	60.0	F	60.0	7
671	155	68.0	60.0	F	60.0	7
672	155	68.0	60.0	F	60.0	7
673	155	68.0	60.0	F	56.0	7
674	156	68.0	60.0	M	67.5	4
675	156	68.0	60.0	M	67.0	4
676	156	68.0	60.0	M	66.5	4
677	156	68.0	60.0	F	60.0	4
678	157	68.5	59.0	M	69.0	1
679	158	68.0	59.0	M	68.0	10
680	158	68.0	59.0	M	65.0	10
681	158	68.0	59.0	M	64.7	10
682	158	68.0	59.0	M	64.0	10
683	158	68.0	59.0	M	64.0	10
684	158	68.0	59.0	M	63.0	10
685	158	68.0	59.0	F	65.0	10
686	158	68.0	59.0	F	65.0	10
687	158	68.0	59.0	F	62.0	10
688	158	68.0	59.0	F	61.0	10
689	159	67.0	66.2	M	72.7	5
690	159	67.0	66.2	M	72.7	5
691	159	67.0	66.2	M	71.5	5
692	159	67.0	66.2	F	65.5	5
693	159	67.0	66.2	F	63.5	5
694	160	67.0	66.5	M	71.0	1
695	162	67.0	65.0	M	69.7	6
696	162	67.0	65.0	M	67.5	6
697	162	67.0	65.0	F	65.5	6
698	162	67.0	65.0	F	65.0	6
699	162	67.0	65.0	F	64.5	6
700	162	67.0	65.0	F	63.5	6
701	163	67.0	65.5	M	70.0	5
702	163	67.0	65.5	M	69.0	5
703	163	67.0	65.5	F	65.5	5
704	163	67.0	65.5	F	65.5	5
705	163	67.0	65.5	F	63.0	5
706	164	67.0	65.5	M	70.0	4
707	164	67.0	65.5	M	67.7	4
708	164	67.0	65.5	F	63.0	4
709	164	67.0	65.5	F	60.0	4

710	165	67.0	65.0	M	65.0	3
711	165	67.0	65.0	F	62.0	3
712	165	67.0	65.0	F	62.0	3
713	166	67.5	65.0	M	71.0	11
714	166	67.5	65.0	M	69.0	11
715	166	67.5	65.0	F	64.0	11
716	166	67.5	65.0	F	64.0	11
717	166	67.5	65.0	F	63.0	11
718	166	67.5	65.0	F	63.0	11
719	166	67.5	65.0	F	63.0	11
720	166	67.5	65.0	F	63.0	11
721	166	67.5	65.0	F	63.0	11
722	166	67.5	65.0	F	62.5	11
723	166	67.5	65.0	F	62.0	11
724	167	67.0	64.0	M	71.5	4
725	167	67.0	64.0	M	70.0	4
726	167	67.0	64.0	M	67.0	4
727	167	67.0	64.0	M	67.0	4
728	168	67.0	63.5	M	71.0	8
729	168	67.0	63.5	M	70.2	8
730	168	67.0	63.5	M	69.2	8
731	168	67.0	63.5	M	68.5	8
732	168	67.0	63.5	M	68.0	8
733	168	67.0	63.5	M	67.0	8
734	168	67.0	63.5	M	65.5	8
735	168	67.0	63.5	F	63.5	8
736	169	67.0	63.0	M	69.0	3
737	169	67.0	63.0	M	68.0	3
738	169	67.0	63.0	F	63.0	3
739	170	67.5	62.0	M	70.0	5
740	170	67.5	62.0	M	69.5	5
741	170	67.5	62.0	M	69.0	5
742	170	67.5	62.0	M	68.5	5
743	170	67.5	62.0	F	66.0	5
744	171	67.0	61.0	M	67.0	1
745	172	66.0	67.0	M	70.5	8
746	172	66.0	67.0	M	70.5	8
747	172	66.0	67.0	M	67.0	8
748	172	66.0	67.0	M	66.0	8
749	172	66.0	67.0	M	66.0	8
750	172	66.0	67.0	F	62.0	8
751	172	66.0	67.0	F	62.0	8
752	172	66.0	67.0	F	61.5	8
753	173	66.0	67.0	M	72.0	9
754	173	66.0	67.0	M	65.0	9
755	173	66.0	67.0	M	65.0	9
756	173	66.0	67.0	F	67.0	9
757	173	66.0	67.0	F	64.0	9
758	173	66.0	67.0	F	64.0	9
759	173	66.0	67.0	F	62.0	9

760	173	66.0	67.0	F	60.0	9
761	173	66.0	67.0	F	60.0	9
762	174	66.0	66.0	M	66.0	5
763	174	66.0	66.0	M	65.0	5
764	174	66.0	66.0	F	67.0	5
765	174	66.0	66.0	F	66.5	5
766	174	66.0	66.0	F	65.5	5
767	175	66.0	66.0	M	72.0	6
768	175	66.0	66.0	M	68.0	6
769	175	66.0	66.0	F	66.0	6
770	175	66.0	66.0	F	65.0	6
771	175	66.0	66.0	F	62.0	6
772	175	66.0	66.0	F	61.0	6
773	176	66.5	65.0	M	68.7	8
774	176	66.5	65.0	M	68.5	8
775	176	66.5	65.0	M	66.5	8
776	176	66.5	65.0	M	64.5	8
777	176	66.5	65.0	F	62.5	8
778	176	66.5	65.0	F	60.5	8
779	176	66.5	65.0	F	60.5	8
780	176	66.5	65.0	F	57.5	8
781	177	66.0	65.5	M	72.0	5
782	177	66.0	65.5	M	71.0	5
783	177	66.0	65.5	M	67.0	5
784	177	66.0	65.5	F	66.0	5
785	177	66.0	65.5	F	65.0	5
786	178	66.0	63.0	M	70.0	1
787	179	66.0	63.5	F	64.5	2
788	179	66.0	63.5	F	62.0	2
789	180	66.5	63.0	M	67.2	6
790	180	66.5	63.0	M	67.0	6
791	180	66.5	63.0	M	65.0	6
792	180	66.5	63.0	F	65.0	6
793	180	66.5	63.0	F	65.0	6
794	180	66.5	63.0	F	63.0	6
795	181	66.5	62.5	M	70.0	7
796	181	66.5	62.5	M	68.0	7
797	181	66.5	62.5	F	63.5	7
798	181	66.5	62.5	F	62.5	7
799	181	66.5	62.5	F	62.5	7
800	181	66.5	62.5	F	62.5	7
801	181	66.5	62.5	F	62.5	7
802	182	66.0	61.5	M	70.0	1
803	183	66.0	60.0	M	68.0	4
804	183	66.0	60.0	M	67.0	4
805	183	66.0	60.0	M	65.0	4
806	183	66.0	60.0	F	60.0	4
807	184	66.0	60.0	M	65.0	1
808	185	66.0	59.0	M	68.0	15
809	185	66.0	59.0	M	67.0	15

810	185	66.0	59.0	M	66.5	15
811	185	66.0	59.0	M	66.0	15
812	185	66.0	59.0	M	65.7	15
813	185	66.0	59.0	M	65.5	15
814	185	66.0	59.0	M	65.0	15
815	185	66.0	59.0	F	65.0	15
816	185	66.0	59.0	F	64.0	15
817	185	66.0	59.0	F	63.0	15
818	185	66.0	59.0	F	62.0	15
819	185	66.0	59.0	F	61.0	15
820	185	66.0	59.0	F	60.0	15
821	185	66.0	59.0	F	58.0	15
822	185	66.0	59.0	F	57.0	15
823	186	65.0	67.0	M	66.5	4
824	186	65.0	67.0	M	66.0	4
825	186	65.0	67.0	M	66.0	4
826	186	65.0	67.0	F	65.0	4
827	187	65.0	67.0	F	63.0	1
828	188	65.0	66.0	M	63.0	4
829	188	65.0	66.0	F	63.0	4
830	188	65.0	66.0	F	63.0	4
831	188	65.0	66.0	F	60.0	4
832	190	65.0	65.0	M	69.0	9
833	190	65.0	65.0	M	68.0	9
834	190	65.0	65.0	M	68.0	9
835	190	65.0	65.0	F	65.0	9
836	190	65.0	65.0	F	65.0	9
837	190	65.0	65.0	F	62.0	9
838	190	65.0	65.0	F	62.0	9
839	190	65.0	65.0	F	61.0	9
840	190	65.0	65.0	F	59.0	9
841	191	65.0	65.5	M	70.7	2
842	191	65.0	65.5	F	65.5	2
843	192	65.0	65.0	M	69.2	6
844	192	65.0	65.0	M	69.0	6
845	192	65.0	65.0	M	68.0	6
846	192	65.0	65.0	M	67.7	6
847	192	65.0	65.0	F	64.5	6
848	192	65.0	65.0	F	60.5	6
849	193	65.0	64.0	M	67.0	6
850	193	65.0	64.0	M	67.0	6
851	193	65.0	64.0	F	64.0	6
852	193	65.0	64.0	F	64.0	6
853	193	65.0	64.0	F	62.5	6
854	193	65.0	64.0	F	60.5	6
855	194	65.0	63.0	M	70.0	2
856	194	65.0	63.0	F	63.0	2
857	195	65.0	63.0	M	66.0	3
858	195	65.0	63.0	M	66.0	3
859	195	65.0	63.0	F	63.0	3

860	196	65.5	63.0	M	71.0	4
861	196	65.5	63.0	M	71.0	4
862	196	65.5	63.0	M	69.0	4
863	196	65.5	63.0	F	63.5	4
864	197	65.5	60.0	M	68.0	5
865	197	65.5	60.0	M	68.0	5
866	197	65.5	60.0	M	67.0	5
867	197	65.5	60.0	M	67.0	5
868	197	65.5	60.0	F	62.0	5
869	198	64.0	64.0	M	71.5	7
870	198	64.0	64.0	M	68.0	7
871	198	64.0	64.0	F	65.5	7
872	198	64.0	64.0	F	64.0	7
873	198	64.0	64.0	F	62.0	7
874	198	64.0	64.0	F	62.0	7
875	198	64.0	64.0	F	61.0	7
876	199	64.0	64.0	M	70.5	7
877	199	64.0	64.0	M	68.0	7
878	199	64.0	64.0	F	67.0	7
879	199	64.0	64.0	F	65.0	7
880	199	64.0	64.0	F	64.0	7
881	199	64.0	64.0	F	64.0	7
882	199	64.0	64.0	F	60.0	7
883	200	64.0	63.0	M	64.5	1
884	201	64.0	60.0	M	66.0	2
885	201	64.0	60.0	F	60.0	2
886	203	62.0	66.0	M	64.0	3
887	203	62.0	66.0	F	62.0	3
888	203	62.0	66.0	F	61.0	3
889	204	62.5	63.0	M	66.5	2
890	204	62.5	63.0	F	57.0	2
891	136A	68.5	65.0	M	72.0	8
892	136A	68.5	65.0	M	70.5	8
893	136A	68.5	65.0	M	68.7	8
894	136A	68.5	65.0	M	68.5	8
895	136A	68.5	65.0	M	67.7	8
896	136A	68.5	65.0	F	64.0	8
897	136A	68.5	65.0	F	63.5	8
898	136A	68.5	65.0	F	63.0	8

```
> read.csv("~/Desktop/Galton.csv")
```

	Family	Father	Mother	Gender	Height	Kids
1	1	78.5	67.0	M	73.2	4
2	1	78.5	67.0	F	69.2	4
3	1	78.5	67.0	F	69.0	4
4	1	78.5	67.0	F	69.0	4
5	2	75.5	66.5	M	73.5	4
6	2	75.5	66.5	M	72.5	4
7	2	75.5	66.5	F	65.5	4
8	2	75.5	66.5	F	65.5	4
9	3	75.0	64.0	M	71.0	2

10	3	75.0	64.0	F	68.0	2
11	4	75.0	64.0	M	70.5	5
12	4	75.0	64.0	M	68.5	5
13	4	75.0	64.0	F	67.0	5
14	4	75.0	64.0	F	64.5	5
15	4	75.0	64.0	F	63.0	5
16	5	75.0	58.5	M	72.0	6
17	5	75.0	58.5	M	69.0	6
18	5	75.0	58.5	M	68.0	6
19	5	75.0	58.5	F	66.5	6
20	5	75.0	58.5	F	62.5	6
21	5	75.0	58.5	F	62.5	6
22	6	74.0	68.0	F	69.5	1
23	7	74.0	68.0	M	76.5	6
24	7	74.0	68.0	M	74.0	6
25	7	74.0	68.0	M	73.0	6
26	7	74.0	68.0	M	73.0	6
27	7	74.0	68.0	F	70.5	6
28	7	74.0	68.0	F	64.0	6
29	8	74.0	66.5	F	70.5	3
30	8	74.0	66.5	F	68.0	3
31	8	74.0	66.5	F	66.0	3
32	9	74.5	66.0	F	66.0	1
33	10	74.0	65.5	F	65.5	1
34	11	74.0	62.0	M	74.0	8
35	11	74.0	62.0	M	70.0	8
36	11	74.0	62.0	F	68.0	8
37	11	74.0	62.0	F	67.0	8
38	11	74.0	62.0	F	67.0	8
39	11	74.0	62.0	F	66.0	8
40	11	74.0	62.0	F	63.5	8
41	11	74.0	62.0	F	63.0	8
42	12	74.0	61.0	F	65.0	1
43	14	73.0	67.0	M	68.0	2
44	14	73.0	67.0	M	67.0	2
45	15	73.0	66.5	M	71.0	3
46	15	73.0	66.5	M	70.5	3
47	15	73.0	66.5	F	66.7	3
48	16	73.0	65.0	M	72.0	9
49	16	73.0	65.0	M	70.5	9
50	16	73.0	65.0	M	70.2	9
51	16	73.0	65.0	M	70.2	9
52	16	73.0	65.0	M	69.2	9
53	16	73.0	65.0	F	68.7	9
54	16	73.0	65.0	F	66.5	9
55	16	73.0	65.0	F	64.5	9
56	16	73.0	65.0	F	63.5	9
57	17	73.0	64.5	M	74.0	6
58	17	73.0	64.5	M	73.0	6
59	17	73.0	64.5	M	71.5	6

60	17	73.0	64.5	M	62.5	6
61	17	73.0	64.5	F	66.5	6
62	17	73.0	64.5	F	62.3	6
63	18	73.0	64.0	F	66.0	3
64	18	73.0	64.0	F	64.5	3
65	18	73.0	64.0	F	64.0	3
66	19	73.2	63.0	F	62.7	1
67	20	72.7	69.0	M	73.2	8
68	20	72.7	69.0	M	73.0	8
69	20	72.7	69.0	M	72.7	8
70	20	72.7	69.0	F	70.0	8
71	20	72.7	69.0	F	69.0	8
72	20	72.7	69.0	F	68.5	8
73	20	72.7	69.0	F	68.0	8
74	20	72.7	69.0	F	66.0	8
75	21	72.0	68.0	M	73.0	3
76	21	72.0	68.0	F	68.5	3
77	21	72.0	68.0	F	68.0	3
78	22	72.0	67.0	M	73.0	3
79	22	72.0	67.0	M	71.0	3
80	22	72.0	67.0	F	67.0	3
81	23	72.0	65.0	M	74.2	7
82	23	72.0	65.0	M	70.5	7
83	23	72.0	65.0	M	69.5	7
84	23	72.0	65.0	F	66.0	7
85	23	72.0	65.0	F	65.5	7
86	23	72.0	65.0	F	65.0	7
87	23	72.0	65.0	F	65.0	7
88	24	72.0	65.5	F	65.5	1
89	25	72.0	64.0	F	66.0	2
90	25	72.0	64.0	F	63.0	2
91	26	72.0	63.0	M	70.5	5
92	26	72.0	63.0	M	70.5	5
93	26	72.0	63.0	M	69.0	5
94	26	72.0	63.0	F	65.0	5
95	26	72.0	63.0	F	63.0	5
96	27	72.0	63.0	M	69.0	3
97	27	72.0	63.0	M	67.0	3
98	27	72.0	63.0	F	63.0	3
99	28	72.0	63.0	M	73.0	6
100	28	72.0	63.0	M	67.0	6
101	28	72.0	63.0	F	70.5	6
102	28	72.0	63.0	F	70.0	6
103	28	72.0	63.0	F	66.5	6
104	28	72.0	63.0	F	63.0	6
105	29	72.5	63.5	F	67.5	3
106	29	72.5	63.5	F	67.2	3
107	29	72.5	63.5	F	66.7	3
108	30	72.0	62.0	F	64.0	1
109	31	72.5	62.0	M	71.0	6

110	31	72.5	62.0	M	70.0	6
111	31	72.5	62.0	M	70.0	6
112	31	72.5	62.0	F	66.0	6
113	31	72.5	62.0	F	65.0	6
114	31	72.5	62.0	F	65.0	6
115	32	72.0	62.0	M	74.0	5
116	32	72.0	62.0	M	72.0	5
117	32	72.0	62.0	M	69.0	5
118	32	72.0	62.0	F	67.5	5
119	32	72.0	62.0	F	63.5	5
120	33	72.0	62.0	M	72.0	5
121	33	72.0	62.0	M	71.5	5
122	33	72.0	62.0	M	71.5	5
123	33	72.0	62.0	M	70.0	5
124	33	72.0	62.0	F	68.0	5
125	34	72.0	61.0	F	65.7	1
126	35	71.0	69.0	M	78.0	5
127	35	71.0	69.0	M	74.0	5
128	35	71.0	69.0	M	73.0	5
129	35	71.0	69.0	M	72.0	5
130	35	71.0	69.0	F	67.0	5
131	36	71.0	67.0	M	73.2	4
132	36	71.0	67.0	M	73.0	4
133	36	71.0	67.0	M	69.0	4
134	36	71.0	67.0	F	67.0	4
135	37	71.0	66.0	M	70.0	4
136	37	71.0	66.0	F	67.0	4
137	37	71.0	66.0	F	67.0	4
138	37	71.0	66.0	F	66.5	4
139	38	71.0	66.0	M	70.0	6
140	38	71.0	66.0	M	69.0	6
141	38	71.0	66.0	M	68.5	6
142	38	71.0	66.0	F	66.0	6
143	38	71.0	66.0	F	64.5	6
144	38	71.0	66.0	F	63.0	6
145	39	71.0	66.0	M	71.0	2
146	39	71.0	66.0	F	67.0	2
147	40	71.0	66.0	M	76.0	5
148	40	71.0	66.0	M	72.0	5
149	40	71.0	66.0	M	71.0	5
150	40	71.0	66.0	M	66.0	5
151	40	71.0	66.0	F	66.0	5
152	41	71.7	65.5	M	70.5	1
153	42	71.0	65.5	M	72.0	6
154	42	71.0	65.5	M	72.0	6
155	42	71.0	65.5	M	71.0	6
156	42	71.0	65.5	M	69.0	6
157	42	71.0	65.5	F	66.0	6
158	42	71.0	65.5	F	65.0	6
159	43	71.5	65.5	M	73.0	2

160	43	71.5	65.5	F	65.2	2
161	44	71.5	65.0	M	68.5	2
162	44	71.5	65.0	M	67.7	2
163	45	71.0	65.0	M	68.0	3
164	45	71.0	65.0	M	68.0	3
165	45	71.0	65.0	F	62.0	3
166	46	71.0	64.0	F	68.0	8
167	46	71.0	64.0	F	68.0	8
168	46	71.0	64.0	F	67.5	8
169	46	71.0	64.0	F	66.5	8
170	46	71.0	64.0	F	66.5	8
171	46	71.0	64.0	F	66.0	8
172	46	71.0	64.0	F	65.5	8
173	46	71.0	64.0	F	65.0	8
174	47	71.7	64.5	M	72.0	4
175	47	71.7	64.5	M	71.0	4
176	47	71.7	64.5	M	70.5	4
177	47	71.7	64.5	F	67.0	4
178	48	71.0	64.0	M	68.0	3
179	48	71.0	64.0	M	68.0	3
180	48	71.0	64.0	M	68.0	3
181	49	71.5	64.5	M	72.0	7
182	49	71.5	64.5	M	71.0	7
183	49	71.5	64.5	M	70.0	7
184	49	71.5	64.5	F	66.0	7
185	49	71.5	64.5	F	64.5	7
186	49	71.5	64.5	F	64.5	7
187	49	71.5	64.5	F	62.0	7
188	51	71.2	63.0	F	67.5	2
189	51	71.2	63.0	F	64.5	2
190	52	71.0	63.5	M	71.0	5
191	52	71.0	63.5	M	67.0	5
192	52	71.0	63.5	F	66.0	5
193	52	71.0	63.5	F	65.0	5
194	52	71.0	63.5	F	63.5	5
195	53	71.0	63.0	M	71.0	9
196	53	71.0	63.0	M	70.0	9
197	53	71.0	63.0	M	70.0	9
198	53	71.0	63.0	M	64.0	9
199	53	71.0	63.0	F	65.0	9
200	53	71.0	63.0	F	65.0	9
201	53	71.0	63.0	F	64.0	9
202	53	71.0	63.0	F	63.0	9
203	53	71.0	63.0	F	63.0	9
204	54	71.0	63.0	M	71.0	4
205	54	71.0	63.0	M	71.0	4
206	54	71.0	63.0	M	70.0	4
207	54	71.0	63.0	F	63.5	4
208	55	71.0	62.0	M	71.0	5
209	55	71.0	62.0	M	70.0	5

210	55	71.0	62.0	F	64.5	5
211	55	71.0	62.0	F	62.5	5
212	55	71.0	62.0	F	61.5	5
213	56	71.0	62.0	M	72.0	5
214	56	71.0	62.0	M	70.5	5
215	56	71.0	62.0	M	70.5	5
216	56	71.0	62.0	F	64.5	5
217	56	71.0	62.0	F	60.0	5
218	57	71.0	62.5	M	70.0	5
219	57	71.0	62.5	F	64.0	5
220	57	71.0	62.5	F	64.0	5
221	57	71.0	62.5	F	64.0	5
222	57	71.0	62.5	F	62.5	5
223	58	71.0	62.0	M	70.5	7
224	58	71.0	62.0	M	70.0	7
225	58	71.0	62.0	M	69.0	7
226	58	71.0	62.0	M	69.0	7
227	58	71.0	62.0	M	66.0	7
228	58	71.0	62.0	F	64.5	7
229	58	71.0	62.0	F	64.0	7
230	59	71.0	61.0	F	62.0	1
231	60	71.0	58.0	M	71.5	2
232	60	71.0	58.0	M	69.0	2
233	61	70.0	69.0	M	71.0	4
234	61	70.0	69.0	M	70.0	4
235	61	70.0	69.0	M	69.0	4
236	61	70.0	69.0	F	69.0	4
237	62	70.0	69.0	M	70.0	6
238	62	70.0	69.0	M	68.7	6
239	62	70.0	69.0	F	68.0	6
240	62	70.0	69.0	F	66.0	6
241	62	70.0	69.0	F	64.0	6
242	62	70.0	69.0	F	62.0	6
243	63	70.0	68.0	M	75.0	1
244	64	70.0	67.0	M	70.0	5
245	64	70.0	67.0	M	69.0	5
246	64	70.0	67.0	F	66.0	5
247	64	70.0	67.0	F	64.0	5
248	64	70.0	67.0	F	60.0	5
249	65	70.0	67.0	F	67.5	1
250	66	70.0	66.5	M	73.0	11
251	66	70.0	66.5	M	72.0	11
252	66	70.0	66.5	M	72.0	11
253	66	70.0	66.5	M	66.5	11
254	66	70.0	66.5	F	69.2	11
255	66	70.0	66.5	F	67.2	11
256	66	70.0	66.5	F	66.5	11
257	66	70.0	66.5	F	66.0	11
258	66	70.0	66.5	F	66.0	11
259	66	70.0	66.5	F	64.2	11

260	66	70.0	66.5	F	63.7	11
261	67	70.5	65.0	M	72.0	4
262	67	70.5	65.0	M	70.2	4
263	67	70.5	65.0	M	69.0	4
264	67	70.5	65.0	M	68.5	4
265	68	70.5	65.0	F	68.0	5
266	68	70.5	65.0	F	65.0	5
267	68	70.5	65.0	F	61.5	5
268	68	70.5	65.0	F	61.0	5
269	68	70.5	65.0	F	61.0	5
270	69	70.0	65.0	M	73.0	8
271	69	70.0	65.0	M	72.0	8
272	69	70.0	65.0	M	70.5	8
273	69	70.0	65.0	M	65.0	8
274	69	70.0	65.0	M	65.0	8
275	69	70.0	65.0	F	64.5	8
276	69	70.0	65.0	F	63.0	8
277	69	70.0	65.0	F	62.0	8
278	70	70.0	65.0	M	67.0	5
279	70	70.0	65.0	M	65.0	5
280	70	70.0	65.0	F	64.5	5
281	70	70.0	65.0	F	62.5	5
282	70	70.0	65.0	F	62.5	5
283	71	70.0	65.0	M	70.0	6
284	71	70.0	65.0	M	70.0	6
285	71	70.0	65.0	F	67.0	6
286	71	70.0	65.0	F	65.0	6
287	71	70.0	65.0	F	65.0	6
288	71	70.0	65.0	F	63.0	6
289	72	70.0	65.0	M	79.0	7
290	72	70.0	65.0	M	75.0	7
291	72	70.0	65.0	M	71.0	7
292	72	70.0	65.0	F	69.0	7
293	72	70.0	65.0	F	67.0	7
294	72	70.0	65.0	F	65.7	7
295	72	70.0	65.0	F	62.0	7
296	73	70.0	65.0	M	73.0	3
297	73	70.0	65.0	M	72.5	3
298	73	70.0	65.0	F	65.0	3
299	74	70.0	65.0	M	69.0	2
300	74	70.0	65.0	M	69.0	2
301	75	70.0	64.7	M	72.0	7
302	75	70.0	64.7	M	70.0	7
303	75	70.0	64.7	M	68.7	7
304	75	70.0	64.7	F	66.5	7
305	75	70.0	64.7	F	65.5	7
306	75	70.0	64.7	F	64.7	7
307	75	70.0	64.7	F	64.5	7
308	76	70.0	64.0	M	70.7	7
309	76	70.0	64.0	M	70.0	7

310	76	70.0	64.0	M	68.0	7
311	76	70.0	64.0	M	67.0	7
312	76	70.0	64.0	M	66.0	7
313	76	70.0	64.0	M	65.0	7
314	76	70.0	64.0	F	67.0	7
315	77	70.0	64.0	M	70.0	4
316	77	70.0	64.0	M	68.0	4
317	77	70.0	64.0	M	66.7	4
318	77	70.0	64.0	F	65.5	4
319	78	70.0	64.2	M	72.0	5
320	78	70.0	64.2	M	70.0	5
321	78	70.0	64.2	F	62.5	5
322	78	70.0	64.2	F	61.2	5
323	78	70.0	64.2	F	60.1	5
324	79	70.5	64.0	M	74.0	8
325	79	70.5	64.0	M	69.5	8
326	79	70.5	64.0	M	69.0	8
327	79	70.5	64.0	M	68.0	8
328	79	70.5	64.0	M	68.0	8
329	79	70.5	64.0	M	68.0	8
330	79	70.5	64.0	F	65.5	8
331	79	70.5	64.0	F	65.0	8
332	80	70.5	64.5	F	60.0	1
333	81	70.0	64.0	M	68.0	4
334	81	70.0	64.0	F	65.0	4
335	81	70.0	64.0	F	64.0	4
336	81	70.0	64.0	F	62.0	4
337	82	70.0	64.0	M	71.0	9
338	82	70.0	64.0	M	70.0	9
339	82	70.0	64.0	M	70.0	9
340	82	70.0	64.0	M	70.0	9
341	82	70.0	64.0	M	69.5	9
342	82	70.0	64.0	M	68.5	9
343	82	70.0	64.0	F	69.0	9
344	82	70.0	64.0	F	65.0	9
345	82	70.0	64.0	F	64.0	9
346	83	70.0	63.7	M	70.0	8
347	83	70.0	63.7	M	67.0	8
348	83	70.0	63.7	M	65.5	8
349	83	70.0	63.7	F	63.7	8
350	83	70.0	63.7	F	63.2	8
351	83	70.0	63.7	F	62.5	8
352	83	70.0	63.7	F	62.2	8
353	83	70.0	63.7	F	61.0	8
354	85	70.5	63.0	M	72.5	5
355	85	70.5	63.0	M	69.0	5
356	85	70.5	63.0	M	67.0	5
357	85	70.5	63.0	F	64.5	5
358	85	70.5	63.0	F	64.0	5
359	86	70.0	63.5	M	71.0	4

360	86	70.0	63.5	M	67.5	4
361	86	70.0	63.5	F	67.5	4
362	86	70.0	63.5	F	63.5	4
363	87	70.0	63.0	M	68.0	4
364	87	70.0	63.0	M	67.0	4
365	87	70.0	63.0	F	63.7	4
366	87	70.0	63.0	F	62.0	4
367	88	70.0	63.0	M	70.0	4
368	88	70.0	63.0	M	66.5	4
369	88	70.0	63.0	F	62.0	4
370	88	70.0	63.0	F	61.0	4
371	89	70.5	62.0	M	72.0	8
372	89	70.5	62.0	M	70.0	8
373	89	70.5	62.0	M	69.5	8
374	89	70.5	62.0	M	69.5	8
375	89	70.5	62.0	M	68.0	8
376	89	70.5	62.0	F	65.0	8
377	89	70.5	62.0	F	64.0	8
378	89	70.5	62.0	F	63.0	8
379	90	70.3	62.7	M	70.7	7
380	90	70.3	62.7	M	69.7	7
381	90	70.3	62.7	M	69.2	7
382	90	70.3	62.7	M	65.2	7
383	90	70.3	62.7	F	64.0	7
384	90	70.3	62.7	F	63.5	7
385	90	70.3	62.7	F	63.2	7
386	91	70.5	62.0	M	72.0	3
387	91	70.5	62.0	M	72.0	3
388	91	70.5	62.0	F	60.0	3
389	92	70.0	61.0	M	71.2	2
390	92	70.0	61.0	M	67.0	2
391	93	70.0	60.0	M	67.0	4
392	93	70.0	60.0	M	64.5	4
393	93	70.0	60.0	F	65.0	4
394	93	70.0	60.0	F	63.0	4
395	94	70.0	60.0	F	65.0	2
396	94	70.0	60.0	F	65.0	2
397	95	70.0	58.5	M	71.5	3
398	95	70.0	58.5	M	64.5	3
399	95	70.0	58.5	F	63.0	3
400	96	70.0	58.0	M	72.0	5
401	96	70.0	58.0	M	66.0	5
402	96	70.0	58.0	F	66.0	5
403	96	70.0	58.0	F	65.0	5
404	96	70.0	58.0	F	63.0	5
405	97	69.0	68.5	M	75.0	10
406	97	69.0	68.5	M	71.0	10
407	97	69.0	68.5	M	70.0	10
408	97	69.0	68.5	F	66.0	10
409	97	69.0	68.5	F	66.0	10

410	97	69.0	68.5	F	65.5	10
411	97	69.0	68.5	F	65.0	10
412	97	69.0	68.5	F	65.0	10
413	97	69.0	68.5	F	64.0	10
414	97	69.0	68.5	F	64.0	10
415	98	69.0	67.0	F	64.0	1
416	99	69.0	66.0	M	73.0	8
417	99	69.0	66.0	M	72.0	8
418	99	69.0	66.0	M	71.7	8
419	99	69.0	66.0	M	71.5	8
420	99	69.0	66.0	F	65.5	8
421	99	69.0	66.0	F	65.0	8
422	99	69.0	66.0	F	62.7	8
423	99	69.0	66.0	F	62.5	8
424	100	69.0	66.0	M	71.2	3
425	100	69.0	66.0	M	71.0	3
426	100	69.0	66.0	M	70.0	3
427	101	69.0	66.7	M	75.0	6
428	101	69.0	66.7	M	74.0	6
429	101	69.0	66.7	M	72.0	6
430	101	69.0	66.7	M	68.5	6
431	101	69.0	66.7	M	67.0	6
432	101	69.0	66.7	M	66.0	6
433	102	69.0	66.0	M	70.0	6
434	102	69.0	66.0	M	68.5	6
435	102	69.0	66.0	M	68.0	6
436	102	69.0	66.0	F	65.0	6
437	102	69.0	66.0	F	63.0	6
438	102	69.0	66.0	F	62.5	6
439	103	69.0	66.5	M	73.0	5
440	103	69.0	66.5	M	71.0	5
441	103	69.0	66.5	M	70.5	5
442	103	69.0	66.5	M	70.5	5
443	103	69.0	66.5	F	61.0	5
444	104	69.5	66.5	M	70.5	4
445	104	69.5	66.5	M	67.5	4
446	104	69.5	66.5	F	64.5	4
447	104	69.5	66.5	F	64.0	4
448	105	69.0	66.5	M	71.0	6
449	105	69.0	66.5	F	68.5	6
450	105	69.0	66.5	F	67.5	6
451	105	69.0	66.5	F	66.0	6
452	105	69.0	66.5	F	63.0	6
453	105	69.0	66.5	F	63.0	6
454	106	69.5	66.0	M	71.0	7
455	106	69.5	66.0	M	71.0	7
456	106	69.5	66.0	M	70.5	7
457	106	69.5	66.0	M	70.5	7
458	106	69.5	66.0	F	66.5	7
459	106	69.5	66.0	F	65.5	7

460	106	69.5	66.0	F	64.5	7
461	107	69.0	66.0	M	73.0	9
462	107	69.0	66.0	M	72.0	9
463	107	69.0	66.0	M	69.0	9
464	107	69.0	66.0	M	69.0	9
465	107	69.0	66.0	F	66.5	9
466	107	69.0	66.0	F	65.5	9
467	107	69.0	66.0	F	65.5	9
468	107	69.0	66.0	F	65.0	9
469	107	69.0	66.0	F	64.0	9
470	108	69.0	65.0	M	70.0	7
471	108	69.0	65.0	M	68.5	7
472	108	69.0	65.0	M	67.0	7
473	108	69.0	65.0	F	65.0	7
474	108	69.0	65.0	F	64.0	7
475	108	69.0	65.0	F	63.5	7
476	108	69.0	65.0	F	61.0	7
477	109	69.5	64.5	M	69.7	7
478	109	69.5	64.5	M	68.0	7
479	109	69.5	64.5	M	60.0	7
480	109	69.5	64.5	F	65.2	7
481	109	69.5	64.5	F	64.5	7
482	109	69.5	64.5	F	63.7	7
483	109	69.5	64.5	F	60.0	7
484	110	69.2	64.0	M	71.7	4
485	110	69.2	64.0	M	66.5	4
486	110	69.2	64.0	F	65.0	4
487	110	69.2	64.0	F	63.5	4
488	112	69.0	63.0	M	69.0	3
489	112	69.0	63.0	F	67.5	3
490	112	69.0	63.0	F	63.5	3
491	113	69.0	63.0	M	72.0	1
492	114	69.0	63.0	M	73.0	6
493	114	69.0	63.0	M	70.0	6
494	114	69.0	63.0	M	70.0	6
495	114	69.0	63.0	M	64.0	6
496	114	69.0	63.0	F	66.0	6
497	114	69.0	63.0	F	62.0	6
498	115	69.0	63.5	M	70.5	7
499	115	69.0	63.5	M	67.0	7
500	115	69.0	63.5	M	66.0	7
501	115	69.0	63.5	F	65.0	7
502	115	69.0	63.5	F	63.0	7
503	115	69.0	63.5	F	62.0	7
504	115	69.0	63.5	F	61.0	7
505	116	69.0	63.5	M	70.5	3
506	116	69.0	63.5	F	63.7	3
507	116	69.0	63.5	F	63.0	3
508	117	69.7	62.0	F	62.5	1
509	118	69.5	62.0	M	73.0	3

510	118	69.5	62.0	M	72.0	3
511	118	69.5	62.0	M	69.0	3
512	119	69.0	62.0	M	73.0	5
513	119	69.0	62.0	M	71.0	5
514	119	69.0	62.0	M	71.0	5
515	119	69.0	62.0	M	69.0	5
516	119	69.0	62.0	F	63.0	5
517	121	69.0	62.5	M	71.0	8
518	121	69.0	62.5	M	70.0	8
519	121	69.0	62.5	M	70.0	8
520	121	69.0	62.5	M	69.0	8
521	121	69.0	62.5	F	63.5	8
522	121	69.0	62.5	F	62.5	8
523	121	69.0	62.5	F	62.5	8
524	121	69.0	62.5	F	62.0	8
525	122	69.0	62.0	M	72.0	4
526	122	69.0	62.0	M	68.0	4
527	122	69.0	62.0	F	66.0	4
528	122	69.0	62.0	F	66.0	4
529	123	69.5	61.0	M	70.0	5
530	123	69.5	61.0	M	69.5	5
531	123	69.5	61.0	M	69.0	5
532	123	69.5	61.0	F	63.0	5
533	123	69.5	61.0	F	62.0	5
534	124	69.0	61.0	M	68.0	9
535	124	69.0	61.0	M	68.0	9
536	124	69.0	61.0	M	67.5	9
537	124	69.0	61.0	M	64.0	9
538	124	69.0	61.0	M	63.0	9
539	124	69.0	61.0	M	63.0	9
540	124	69.0	61.0	F	63.5	9
541	124	69.0	61.0	F	62.0	9
542	124	69.0	61.0	F	62.0	9
543	125	69.0	60.0	M	70.5	3
544	125	69.0	60.0	F	68.0	3
545	125	69.0	60.0	F	62.5	3
546	126	69.0	60.0	M	69.0	4
547	126	69.0	60.0	M	66.0	4
548	126	69.0	60.0	F	61.7	4
549	126	69.0	60.0	F	60.5	4
550	127	69.0	60.5	M	69.5	1
551	128	68.7	70.5	M	71.0	2
552	128	68.7	70.5	F	61.7	2
553	129	68.5	67.0	M	73.0	3
554	129	68.5	67.0	M	71.0	3
555	129	68.5	67.0	F	67.0	3
556	130	68.5	66.5	M	70.0	11
557	130	68.5	66.5	M	69.0	11
558	130	68.5	66.5	M	69.0	11
559	130	68.5	66.5	M	68.7	11

560	130	68.5	66.5	M	68.5	11
561	130	68.5	66.5	M	68.5	11
562	130	68.5	66.5	M	68.0	11
563	130	68.5	66.5	M	68.0	11
564	130	68.5	66.5	M	68.0	11
565	130	68.5	66.5	F	63.2	11
566	131	68.0	65.0	M	67.5	2
567	131	68.0	65.0	M	66.0	2
568	132	68.0	65.5	M	66.0	2
569	132	68.0	65.5	F	64.0	2
570	133	68.0	65.5	M	71.7	7
571	133	68.0	65.5	M	71.5	7
572	133	68.0	65.5	M	70.7	7
573	133	68.0	65.5	M	65.5	7
574	133	68.0	65.5	F	66.5	7
575	133	68.0	65.5	F	65.2	7
576	133	68.0	65.5	F	61.5	7
577	134	68.0	65.0	M	72.0	4
578	134	68.0	65.0	M	72.0	4
579	134	68.0	65.0	F	68.0	4
580	134	68.0	65.0	F	66.0	4
581	135	68.5	65.0	M	69.2	8
582	135	68.5	65.0	M	68.0	8
583	135	68.5	65.0	M	66.0	8
584	135	68.5	65.0	M	66.0	8
585	135	68.5	65.0	F	62.0	8
586	135	68.5	65.0	F	61.5	8
587	135	68.5	65.0	F	61.0	8
588	135	68.5	65.0	F	60.0	8
589	136	68.0	64.0	M	71.0	10
590	136	68.0	64.0	M	68.0	10
591	136	68.0	64.0	M	68.0	10
592	136	68.0	64.0	M	67.0	10
593	136	68.0	64.0	F	65.0	10
594	136	68.0	64.0	F	64.0	10
595	136	68.0	64.0	F	63.0	10
596	136	68.0	64.0	F	63.0	10
597	136	68.0	64.0	F	62.0	10
598	136	68.0	64.0	F	61.0	10
599	137	68.0	64.0	M	66.0	4
600	137	68.0	64.0	M	63.0	4
601	137	68.0	64.0	F	65.5	4
602	137	68.0	64.0	F	62.0	4
603	138	68.0	64.0	M	71.2	5
604	138	68.0	64.0	M	71.2	5
605	138	68.0	64.0	M	69.0	5
606	138	68.0	64.0	M	68.5	5
607	138	68.0	64.0	F	62.5	5
608	139	68.0	64.5	F	62.0	1
609	140	68.0	64.0	M	69.0	10

610	140	68.0	64.0	M	67.0	10
611	140	68.0	64.0	M	66.0	10
612	140	68.0	64.0	F	66.0	10
613	140	68.0	64.0	F	66.0	10
614	140	68.0	64.0	F	65.0	10
615	140	68.0	64.0	F	65.0	10
616	140	68.0	64.0	F	65.0	10
617	140	68.0	64.0	F	64.0	10
618	140	68.0	64.0	F	63.0	10
619	141	68.0	63.0	M	70.5	8
620	141	68.0	63.0	M	70.0	8
621	141	68.0	63.0	M	68.0	8
622	141	68.0	63.0	M	66.0	8
623	141	68.0	63.0	M	66.0	8
624	141	68.0	63.0	F	66.0	8
625	141	68.0	63.0	F	62.0	8
626	141	68.0	63.0	F	61.5	8
627	142	68.5	63.5	M	73.5	4
628	142	68.5	63.5	M	70.0	4
629	142	68.5	63.5	M	69.5	4
630	142	68.5	63.5	F	65.5	4
631	143	68.0	63.0	M	67.0	1
632	144	68.0	63.0	M	70.0	4
633	144	68.0	63.0	M	68.0	4
634	144	68.0	63.0	F	64.5	4
635	144	68.0	63.0	F	64.0	4
636	145	68.0	63.0	M	71.0	8
637	145	68.0	63.0	M	68.0	8
638	145	68.0	63.0	M	66.0	8
639	145	68.0	63.0	M	65.5	8
640	145	68.0	63.0	M	65.0	8
641	145	68.0	63.0	F	63.0	8
642	145	68.0	63.0	F	62.0	8
643	145	68.0	63.0	F	62.0	8
644	146	68.0	63.0	M	67.0	6
645	146	68.0	63.0	M	67.0	6
646	146	68.0	63.0	M	66.0	6
647	146	68.0	63.0	F	64.0	6
648	146	68.0	63.0	F	63.5	6
649	146	68.0	63.0	F	61.0	6
650	147	68.5	63.5	M	68.2	1
651	148	68.0	63.0	M	70.0	1
652	149	68.2	63.5	M	70.0	5
653	149	68.2	63.5	M	69.0	5
654	149	68.2	63.5	M	67.0	5
655	149	68.2	63.5	M	65.5	5
656	149	68.2	63.5	F	64.5	5
657	150	68.0	62.5	M	68.5	1
658	151	68.7	62.0	M	67.7	2
659	151	68.7	62.0	F	61.7	2

660	152	68.0	62.5	M	66.5	1
661	153	68.0	61.0	M	68.5	5
662	153	68.0	61.0	M	68.0	5
663	153	68.0	61.0	M	64.0	5
664	153	68.0	61.0	F	63.5	5
665	153	68.0	61.0	F	63.0	5
666	154	68.0	60.2	M	66.7	1
667	155	68.0	60.0	M	64.0	7
668	155	68.0	60.0	F	61.0	7
669	155	68.0	60.0	F	61.0	7
670	155	68.0	60.0	F	60.0	7
671	155	68.0	60.0	F	60.0	7
672	155	68.0	60.0	F	60.0	7
673	155	68.0	60.0	F	56.0	7
674	156	68.0	60.0	M	67.5	4
675	156	68.0	60.0	M	67.0	4
676	156	68.0	60.0	M	66.5	4
677	156	68.0	60.0	F	60.0	4
678	157	68.5	59.0	M	69.0	1
679	158	68.0	59.0	M	68.0	10
680	158	68.0	59.0	M	65.0	10
681	158	68.0	59.0	M	64.7	10
682	158	68.0	59.0	M	64.0	10
683	158	68.0	59.0	M	64.0	10
684	158	68.0	59.0	M	63.0	10
685	158	68.0	59.0	F	65.0	10
686	158	68.0	59.0	F	65.0	10
687	158	68.0	59.0	F	62.0	10
688	158	68.0	59.0	F	61.0	10
689	159	67.0	66.2	M	72.7	5
690	159	67.0	66.2	M	72.7	5
691	159	67.0	66.2	M	71.5	5
692	159	67.0	66.2	F	65.5	5
693	159	67.0	66.2	F	63.5	5
694	160	67.0	66.5	M	71.0	1
695	162	67.0	65.0	M	69.7	6
696	162	67.0	65.0	M	67.5	6
697	162	67.0	65.0	F	65.5	6
698	162	67.0	65.0	F	65.0	6
699	162	67.0	65.0	F	64.5	6
700	162	67.0	65.0	F	63.5	6
701	163	67.0	65.5	M	70.0	5
702	163	67.0	65.5	M	69.0	5
703	163	67.0	65.5	F	65.5	5
704	163	67.0	65.5	F	65.5	5
705	163	67.0	65.5	F	63.0	5
706	164	67.0	65.5	M	70.0	4
707	164	67.0	65.5	M	67.7	4
708	164	67.0	65.5	F	63.0	4
709	164	67.0	65.5	F	60.0	4

710	165	67.0	65.0	M	65.0	3
711	165	67.0	65.0	F	62.0	3
712	165	67.0	65.0	F	62.0	3
713	166	67.5	65.0	M	71.0	11
714	166	67.5	65.0	M	69.0	11
715	166	67.5	65.0	F	64.0	11
716	166	67.5	65.0	F	64.0	11
717	166	67.5	65.0	F	63.0	11
718	166	67.5	65.0	F	63.0	11
719	166	67.5	65.0	F	63.0	11
720	166	67.5	65.0	F	63.0	11
721	166	67.5	65.0	F	63.0	11
722	166	67.5	65.0	F	62.5	11
723	166	67.5	65.0	F	62.0	11
724	167	67.0	64.0	M	71.5	4
725	167	67.0	64.0	M	70.0	4
726	167	67.0	64.0	M	67.0	4
727	167	67.0	64.0	M	67.0	4
728	168	67.0	63.5	M	71.0	8
729	168	67.0	63.5	M	70.2	8
730	168	67.0	63.5	M	69.2	8
731	168	67.0	63.5	M	68.5	8
732	168	67.0	63.5	M	68.0	8
733	168	67.0	63.5	M	67.0	8
734	168	67.0	63.5	M	65.5	8
735	168	67.0	63.5	F	63.5	8
736	169	67.0	63.0	M	69.0	3
737	169	67.0	63.0	M	68.0	3
738	169	67.0	63.0	F	63.0	3
739	170	67.5	62.0	M	70.0	5
740	170	67.5	62.0	M	69.5	5
741	170	67.5	62.0	M	69.0	5
742	170	67.5	62.0	M	68.5	5
743	170	67.5	62.0	F	66.0	5
744	171	67.0	61.0	M	67.0	1
745	172	66.0	67.0	M	70.5	8
746	172	66.0	67.0	M	70.5	8
747	172	66.0	67.0	M	67.0	8
748	172	66.0	67.0	M	66.0	8
749	172	66.0	67.0	M	66.0	8
750	172	66.0	67.0	F	62.0	8
751	172	66.0	67.0	F	62.0	8
752	172	66.0	67.0	F	61.5	8
753	173	66.0	67.0	M	72.0	9
754	173	66.0	67.0	M	65.0	9
755	173	66.0	67.0	M	65.0	9
756	173	66.0	67.0	F	67.0	9
757	173	66.0	67.0	F	64.0	9
758	173	66.0	67.0	F	64.0	9
759	173	66.0	67.0	F	62.0	9

760	173	66.0	67.0	F	60.0	9
761	173	66.0	67.0	F	60.0	9
762	174	66.0	66.0	M	66.0	5
763	174	66.0	66.0	M	65.0	5
764	174	66.0	66.0	F	67.0	5
765	174	66.0	66.0	F	66.5	5
766	174	66.0	66.0	F	65.5	5
767	175	66.0	66.0	M	72.0	6
768	175	66.0	66.0	M	68.0	6
769	175	66.0	66.0	F	66.0	6
770	175	66.0	66.0	F	65.0	6
771	175	66.0	66.0	F	62.0	6
772	175	66.0	66.0	F	61.0	6
773	176	66.5	65.0	M	68.7	8
774	176	66.5	65.0	M	68.5	8
775	176	66.5	65.0	M	66.5	8
776	176	66.5	65.0	M	64.5	8
777	176	66.5	65.0	F	62.5	8
778	176	66.5	65.0	F	60.5	8
779	176	66.5	65.0	F	60.5	8
780	176	66.5	65.0	F	57.5	8
781	177	66.0	65.5	M	72.0	5
782	177	66.0	65.5	M	71.0	5
783	177	66.0	65.5	M	67.0	5
784	177	66.0	65.5	F	66.0	5
785	177	66.0	65.5	F	65.0	5
786	178	66.0	63.0	M	70.0	1
787	179	66.0	63.5	F	64.5	2
788	179	66.0	63.5	F	62.0	2
789	180	66.5	63.0	M	67.2	6
790	180	66.5	63.0	M	67.0	6
791	180	66.5	63.0	M	65.0	6
792	180	66.5	63.0	F	65.0	6
793	180	66.5	63.0	F	65.0	6
794	180	66.5	63.0	F	63.0	6
795	181	66.5	62.5	M	70.0	7
796	181	66.5	62.5	M	68.0	7
797	181	66.5	62.5	F	63.5	7
798	181	66.5	62.5	F	62.5	7
799	181	66.5	62.5	F	62.5	7
800	181	66.5	62.5	F	62.5	7
801	181	66.5	62.5	F	62.5	7
802	182	66.0	61.5	M	70.0	1
803	183	66.0	60.0	M	68.0	4
804	183	66.0	60.0	M	67.0	4
805	183	66.0	60.0	M	65.0	4
806	183	66.0	60.0	F	60.0	4
807	184	66.0	60.0	M	65.0	1
808	185	66.0	59.0	M	68.0	15
809	185	66.0	59.0	M	67.0	15

810	185	66.0	59.0	M	66.5	15
811	185	66.0	59.0	M	66.0	15
812	185	66.0	59.0	M	65.7	15
813	185	66.0	59.0	M	65.5	15
814	185	66.0	59.0	M	65.0	15
815	185	66.0	59.0	F	65.0	15
816	185	66.0	59.0	F	64.0	15
817	185	66.0	59.0	F	63.0	15
818	185	66.0	59.0	F	62.0	15
819	185	66.0	59.0	F	61.0	15
820	185	66.0	59.0	F	60.0	15
821	185	66.0	59.0	F	58.0	15
822	185	66.0	59.0	F	57.0	15
823	186	65.0	67.0	M	66.5	4
824	186	65.0	67.0	M	66.0	4
825	186	65.0	67.0	M	66.0	4
826	186	65.0	67.0	F	65.0	4
827	187	65.0	67.0	F	63.0	1
828	188	65.0	66.0	M	63.0	4
829	188	65.0	66.0	F	63.0	4
830	188	65.0	66.0	F	63.0	4
831	188	65.0	66.0	F	60.0	4
832	190	65.0	65.0	M	69.0	9
833	190	65.0	65.0	M	68.0	9
834	190	65.0	65.0	M	68.0	9
835	190	65.0	65.0	F	65.0	9
836	190	65.0	65.0	F	65.0	9
837	190	65.0	65.0	F	62.0	9
838	190	65.0	65.0	F	62.0	9
839	190	65.0	65.0	F	61.0	9
840	190	65.0	65.0	F	59.0	9
841	191	65.0	65.5	M	70.7	2
842	191	65.0	65.5	F	65.5	2
843	192	65.0	65.0	M	69.2	6
844	192	65.0	65.0	M	69.0	6
845	192	65.0	65.0	M	68.0	6
846	192	65.0	65.0	M	67.7	6
847	192	65.0	65.0	F	64.5	6
848	192	65.0	65.0	F	60.5	6
849	193	65.0	64.0	M	67.0	6
850	193	65.0	64.0	M	67.0	6
851	193	65.0	64.0	F	64.0	6
852	193	65.0	64.0	F	64.0	6
853	193	65.0	64.0	F	62.5	6
854	193	65.0	64.0	F	60.5	6
855	194	65.0	63.0	M	70.0	2
856	194	65.0	63.0	F	63.0	2
857	195	65.0	63.0	M	66.0	3
858	195	65.0	63.0	M	66.0	3
859	195	65.0	63.0	F	63.0	3

860	196	65.5	63.0	M	71.0	4
861	196	65.5	63.0	M	71.0	4
862	196	65.5	63.0	M	69.0	4
863	196	65.5	63.0	F	63.5	4
864	197	65.5	60.0	M	68.0	5
865	197	65.5	60.0	M	68.0	5
866	197	65.5	60.0	M	67.0	5
867	197	65.5	60.0	M	67.0	5
868	197	65.5	60.0	F	62.0	5
869	198	64.0	64.0	M	71.5	7
870	198	64.0	64.0	M	68.0	7
871	198	64.0	64.0	F	65.5	7
872	198	64.0	64.0	F	64.0	7
873	198	64.0	64.0	F	62.0	7
874	198	64.0	64.0	F	62.0	7
875	198	64.0	64.0	F	61.0	7
876	199	64.0	64.0	M	70.5	7
877	199	64.0	64.0	M	68.0	7
878	199	64.0	64.0	F	67.0	7
879	199	64.0	64.0	F	65.0	7
880	199	64.0	64.0	F	64.0	7
881	199	64.0	64.0	F	64.0	7
882	199	64.0	64.0	F	60.0	7
883	200	64.0	63.0	M	64.5	1
884	201	64.0	60.0	M	66.0	2
885	201	64.0	60.0	F	60.0	2
886	203	62.0	66.0	M	64.0	3
887	203	62.0	66.0	F	62.0	3
888	203	62.0	66.0	F	61.0	3
889	204	62.5	63.0	M	66.5	2
890	204	62.5	63.0	F	57.0	2
891	136A	68.5	65.0	M	72.0	8
892	136A	68.5	65.0	M	70.5	8
893	136A	68.5	65.0	M	68.7	8
894	136A	68.5	65.0	M	68.5	8
895	136A	68.5	65.0	M	67.7	8
896	136A	68.5	65.0	F	64.0	8
897	136A	68.5	65.0	F	63.5	8
898	136A	68.5	65.0	F	63.0	8

```
> data1=read.csv("~/Desktop/Galton.csv")
```

```
> head(data1)
```

	Family	Father	Mother	Gender	Height	Kids
1	1	78.5	67.0	M	73.2	4
2	1	78.5	67.0	F	69.2	4
3	1	78.5	67.0	F	69.0	4
4	1	78.5	67.0	F	69.0	4
5	2	75.5	66.5	M	73.5	4
6	2	75.5	66.5	M	72.5	4

```
> dim(data1)
```

```
[1] 898 6
```

```

> y<-data1$Height
> x1<-data1$Father
> x2<-data2$Mother
Error: object 'data2' not found
> x2<-data1$Mother
> x3<-as.numeric(data$Gender)-1
Error in data$Gender : object of type 'closure' is not subsettable
> x3<-as.numeric(data1$Gender)-1
> head(x3)
[1] 1 0 0 0 1 1
> y
[1] 73.2 69.2 69.0 69.0 73.5 72.5 65.5 65.5 71.0 68.0 70.5 68.5
[13] 67.0 64.5 63.0 72.0 69.0 68.0 66.5 62.5 62.5 69.5 76.5 74.0
[25] 73.0 73.0 70.5 64.0 70.5 68.0 66.0 66.0 65.5 74.0 70.0 68.0
[37] 67.0 67.0 66.0 63.5 63.0 65.0 68.0 67.0 71.0 70.5 66.7 72.0
[49] 70.5 70.2 70.2 69.2 68.7 66.5 64.5 63.5 74.0 73.0 71.5 62.5
[61] 66.5 62.3 66.0 64.5 64.0 62.7 73.2 73.0 72.7 70.0 69.0 68.5
[73] 68.0 66.0 73.0 68.5 68.0 73.0 71.0 67.0 74.2 70.5 69.5 66.0
[85] 65.5 65.0 65.0 65.5 66.0 63.0 70.5 70.5 69.0 65.0 63.0 69.0
[97] 67.0 63.0 73.0 67.0 70.5 70.0 66.5 63.0 67.5 67.2 66.7 64.0
[109] 71.0 70.0 70.0 66.0 65.0 65.0 74.0 72.0 69.0 67.5 63.5 72.0
[121] 71.5 71.5 70.0 68.0 65.7 78.0 74.0 73.0 72.0 67.0 73.2 73.0
[133] 69.0 67.0 70.0 67.0 67.0 66.5 70.0 69.0 68.5 66.0 64.5 63.0
[145] 71.0 67.0 76.0 72.0 71.0 66.0 66.0 70.5 72.0 72.0 71.0 69.0
[157] 66.0 65.0 73.0 65.2 68.5 67.7 68.0 68.0 62.0 68.0 68.0 67.5
[169] 66.5 66.5 66.0 65.5 65.0 72.0 71.0 70.5 67.0 68.0 68.0 68.0
[181] 72.0 71.0 70.0 66.0 64.5 64.5 62.0 67.5 64.5 71.0 67.0 66.0
[193] 65.0 63.5 71.0 70.0 70.0 64.0 65.0 65.0 64.0 63.0 63.0 71.0
[205] 71.0 70.0 63.5 71.0 70.0 64.5 62.5 61.5 72.0 70.5 70.5 64.5
[217] 60.0 70.0 64.0 64.0 64.0 62.5 70.5 70.0 69.0 69.0 66.0 64.5
[229] 64.0 62.0 71.5 69.0 71.0 70.0 69.0 69.0 70.0 68.7 68.0 66.0
[241] 64.0 62.0 75.0 70.0 69.0 66.0 64.0 60.0 67.5 73.0 72.0 72.0
[253] 66.5 69.2 67.2 66.5 66.0 66.0 64.2 63.7 72.0 70.2 69.0 68.5
[265] 68.0 65.0 61.5 61.0 61.0 73.0 72.0 70.5 65.0 65.0 64.5 63.0
[277] 62.0 67.0 65.0 64.5 62.5 62.5 70.0 70.0 67.0 65.0 65.0 63.0
[289] 79.0 75.0 71.0 69.0 67.0 65.7 62.0 73.0 72.5 65.0 69.0 69.0
[301] 72.0 70.0 68.7 66.5 65.5 64.7 64.5 70.7 70.0 68.0 67.0 66.0
[313] 65.0 67.0 70.0 68.0 66.7 65.5 72.0 70.0 62.5 61.2 60.1 74.0
[325] 69.5 69.0 68.0 68.0 68.0 65.5 65.0 60.0 68.0 65.0 64.0 62.0
[337] 71.0 70.0 70.0 70.0 69.5 68.5 69.0 65.0 64.0 70.0 67.0 65.5
[349] 63.7 63.2 62.5 62.2 61.0 72.5 69.0 67.0 64.5 64.0 71.0 67.5
[361] 67.5 63.5 68.0 67.0 63.7 62.0 70.0 66.5 62.0 61.0 72.0 70.0
[373] 69.5 69.5 68.0 65.0 64.0 63.0 70.7 69.7 69.2 65.2 64.0 63.5
[385] 63.2 72.0 72.0 60.0 71.2 67.0 67.0 64.5 65.0 63.0 65.0 65.0
[397] 71.5 64.5 63.0 72.0 66.0 66.0 65.0 63.0 75.0 71.0 70.0 66.0
[409] 66.0 65.5 65.0 65.0 64.0 64.0 64.0 73.0 72.0 71.7 71.5 65.5
[421] 65.0 62.7 62.5 71.2 71.0 70.0 75.0 74.0 72.0 68.5 67.0 66.0
[433] 70.0 68.5 68.0 65.0 63.0 62.5 73.0 71.0 70.5 70.5 61.0 70.5
[445] 67.5 64.5 64.0 71.0 68.5 67.5 66.0 63.0 63.0 71.0 71.0 70.5
[457] 70.5 66.5 65.5 64.5 73.0 72.0 69.0 69.0 66.5 65.5 65.5 65.0

```

```

[469] 64.0 70.0 68.5 67.0 65.0 64.0 63.5 61.0 69.7 68.0 60.0 65.2
[481] 64.5 63.7 60.0 71.7 66.5 65.0 63.5 69.0 67.5 63.5 72.0 73.0
[493] 70.0 70.0 64.0 66.0 62.0 70.5 67.0 66.0 65.0 63.0 62.0 61.0
[505] 70.5 63.7 63.0 62.5 73.0 72.0 69.0 73.0 71.0 71.0 69.0 63.0
[517] 71.0 70.0 70.0 69.0 63.5 62.5 62.5 62.0 72.0 68.0 66.0 66.0
[529] 70.0 69.5 69.0 63.0 62.0 68.0 68.0 67.5 64.0 63.0 63.0 63.5
[541] 62.0 62.0 70.5 68.0 62.5 69.0 66.0 61.7 60.5 69.5 71.0 61.7
[553] 73.0 71.0 67.0 70.0 69.0 69.0 68.7 68.5 68.5 68.0 68.0 68.0
[565] 63.2 67.5 66.0 66.0 64.0 71.7 71.5 70.7 65.5 66.5 65.2 61.5
[577] 72.0 72.0 68.0 66.0 69.2 68.0 66.0 66.0 62.0 61.5 61.0 60.0
[589] 71.0 68.0 68.0 67.0 65.0 64.0 63.0 63.0 62.0 61.0 66.0 63.0
[601] 65.5 62.0 71.2 71.2 69.0 68.5 62.5 62.0 69.0 67.0 66.0 66.0
[613] 66.0 65.0 65.0 65.0 64.0 63.0 70.5 70.0 68.0 66.0 66.0 66.0
[625] 62.0 61.5 73.5 70.0 69.5 65.5 67.0 70.0 68.0 64.5 64.0 71.0
[637] 68.0 66.0 65.5 65.0 63.0 62.0 62.0 67.0 67.0 66.0 64.0 63.5
[649] 61.0 68.2 70.0 70.0 69.0 67.0 65.5 64.5 68.5 67.7 61.7 66.5
[661] 68.5 68.0 64.0 63.5 63.0 66.7 64.0 61.0 61.0 60.0 60.0 60.0
[673] 56.0 67.5 67.0 66.5 60.0 69.0 68.0 65.0 64.7 64.0 64.0 63.0
[685] 65.0 65.0 62.0 61.0 72.7 72.7 71.5 65.5 63.5 71.0 69.7 67.5
[697] 65.5 65.0 64.5 63.5 70.0 69.0 65.5 65.5 63.0 70.0 67.7 63.0
[709] 60.0 65.0 62.0 62.0 71.0 69.0 64.0 64.0 63.0 63.0 63.0 63.0
[721] 63.0 62.5 62.0 71.5 70.0 67.0 67.0 71.0 70.2 69.2 68.5 68.0
[733] 67.0 65.5 63.5 69.0 68.0 63.0 70.0 69.5 69.0 68.5 66.0 67.0
[745] 70.5 70.5 67.0 66.0 66.0 62.0 62.0 61.5 72.0 65.0 65.0 67.0
[757] 64.0 64.0 62.0 60.0 60.0 66.0 65.0 67.0 66.5 65.5 72.0 68.0
[769] 66.0 65.0 62.0 61.0 68.7 68.5 66.5 64.5 62.5 60.5 60.5 57.5
[781] 72.0 71.0 67.0 66.0 65.0 70.0 64.5 62.0 67.2 67.0 65.0 65.0
[793] 65.0 63.0 70.0 68.0 63.5 62.5 62.5 62.5 62.5 70.0 68.0 67.0
[805] 65.0 60.0 65.0 68.0 67.0 66.5 66.0 65.7 65.5 65.0 65.0 64.0
[817] 63.0 62.0 61.0 60.0 58.0 57.0 66.5 66.0 66.0 65.0 63.0 63.0
[829] 63.0 63.0 60.0 69.0 68.0 68.0 65.0 65.0 62.0 62.0 61.0 59.0
[841] 70.7 65.5 69.2 69.0 68.0 67.7 64.5 60.5 67.0 67.0 64.0 64.0
[853] 62.5 60.5 70.0 63.0 66.0 66.0 63.0 71.0 71.0 69.0 63.5 68.0
[865] 68.0 67.0 67.0 62.0 71.5 68.0 65.5 64.0 62.0 62.0 61.0 70.5
[877] 68.0 67.0 65.0 64.0 64.0 60.0 64.5 66.0 60.0 64.0 62.0 61.0
[889] 66.5 57.0 72.0 70.5 68.7 68.5 67.7 64.0 63.5 63.0

```

```
> x1
```

```

[1] 78.5 78.5 78.5 78.5 75.5 75.5 75.5 75.5 75.0 75.0 75.0 75.0
[13] 75.0 75.0 75.0 75.0 75.0 75.0 75.0 75.0 75.0 74.0 74.0 74.0
[25] 74.0 74.0 74.0 74.0 74.0 74.0 74.0 74.5 74.0 74.0 74.0 74.0
[37] 74.0 74.0 74.0 74.0 74.0 74.0 73.0 73.0 73.0 73.0 73.0 73.0
[49] 73.0 73.0 73.0 73.0 73.0 73.0 73.0 73.0 73.0 73.0 73.0 73.0
[61] 73.0 73.0 73.0 73.0 73.0 73.2 72.7 72.7 72.7 72.7 72.7 72.7
[73] 72.7 72.7 72.0 72.0 72.0 72.0 72.0 72.0 72.0 72.0 72.0 72.0
[85] 72.0 72.0 72.0 72.0 72.0 72.0 72.0 72.0 72.0 72.0 72.0 72.0
[97] 72.0 72.0 72.0 72.0 72.0 72.0 72.0 72.0 72.5 72.5 72.5 72.0
[109] 72.5 72.5 72.5 72.5 72.5 72.5 72.0 72.0 72.0 72.0 72.0 72.0
[121] 72.0 72.0 72.0 72.0 72.0 71.0 71.0 71.0 71.0 71.0 71.0 71.0
[133] 71.0 71.0 71.0 71.0 71.0 71.0 71.0 71.0 71.0 71.0 71.0 71.0
[145] 71.0 71.0 71.0 71.0 71.0 71.0 71.0 71.7 71.0 71.0 71.0 71.0

```

[illegible]

```
[757] 66.0 66.0 66.0 66.0 66.0 66.0 66.0 66.0 66.0 66.0 66.0 66.0
[769] 66.0 66.0 66.0 66.0 66.5 66.5 66.5 66.5 66.5 66.5 66.5 66.5
[781] 66.0 66.0 66.0 66.0 66.0 66.0 66.0 66.0 66.5 66.5 66.5 66.5
[793] 66.5 66.5 66.5 66.5 66.5 66.5 66.5 66.5 66.5 66.0 66.0 66.0
[805] 66.0 66.0 66.0 66.0 66.0 66.0 66.0 66.0 66.0 66.0 66.0 66.0
[817] 66.0 66.0 66.0 66.0 66.0 66.0 65.0 65.0 65.0 65.0 65.0 65.0
[829] 65.0 65.0 65.0 65.0 65.0 65.0 65.0 65.0 65.0 65.0 65.0 65.0
[841] 65.0 65.0 65.0 65.0 65.0 65.0 65.0 65.0 65.0 65.0 65.0 65.0
[853] 65.0 65.0 65.0 65.0 65.0 65.0 65.0 65.5 65.5 65.5 65.5 65.5
[865] 65.5 65.5 65.5 65.5 64.0 64.0 64.0 64.0 64.0 64.0 64.0 64.0
[877] 64.0 64.0 64.0 64.0 64.0 64.0 64.0 64.0 64.0 62.0 62.0 62.0
[889] 62.5 62.5 68.5 68.5 68.5 68.5 68.5 68.5 68.5 68.5
```

> x2

```
[1] 67.0 67.0 67.0 67.0 66.5 66.5 66.5 66.5 64.0 64.0 64.0 64.0
[13] 64.0 64.0 64.0 58.5 58.5 58.5 58.5 58.5 58.5 68.0 68.0 68.0
[25] 68.0 68.0 68.0 68.0 66.5 66.5 66.5 66.0 65.5 62.0 62.0 62.0
[37] 62.0 62.0 62.0 62.0 62.0 61.0 67.0 67.0 66.5 66.5 66.5 65.0
[49] 65.0 65.0 65.0 65.0 65.0 65.0 65.0 65.0 64.5 64.5 64.5 64.5
[61] 64.5 64.5 64.0 64.0 64.0 63.0 69.0 69.0 69.0 69.0 69.0 69.0
[73] 69.0 69.0 68.0 68.0 68.0 67.0 67.0 67.0 65.0 65.0 65.0 65.0
[85] 65.0 65.0 65.0 65.5 64.0 64.0 63.0 63.0 63.0 63.0 63.0 63.0
[97] 63.0 63.0 63.0 63.0 63.0 63.0 63.0 63.0 63.5 63.5 63.5 62.0
[109] 62.0 62.0 62.0 62.0 62.0 62.0 62.0 62.0 62.0 62.0 62.0 62.0
[121] 62.0 62.0 62.0 62.0 61.0 69.0 69.0 69.0 69.0 69.0 67.0 67.0
[133] 67.0 67.0 66.0 66.0 66.0 66.0 66.0 66.0 66.0 66.0 66.0 66.0
[145] 66.0 66.0 66.0 66.0 66.0 66.0 66.0 65.5 65.5 65.5 65.5 65.5
[157] 65.5 65.5 65.5 65.5 65.0 65.0 65.0 65.0 65.0 64.0 64.0 64.0
[169] 64.0 64.0 64.0 64.0 64.0 64.5 64.5 64.5 64.5 64.0 64.0 64.0
[181] 64.5 64.5 64.5 64.5 64.5 64.5 64.5 63.0 63.0 63.5 63.5 63.5
[193] 63.5 63.5 63.0 63.0 63.0 63.0 63.0 63.0 63.0 63.0 63.0 63.0
[205] 63.0 63.0 63.0 62.0 62.0 62.0 62.0 62.0 62.0 62.0 62.0 62.0
[217] 62.0 62.5 62.5 62.5 62.5 62.5 62.0 62.0 62.0 62.0 62.0 62.0
[229] 62.0 61.0 58.0 58.0 69.0 69.0 69.0 69.0 69.0 69.0 69.0 69.0
[241] 69.0 69.0 68.0 67.0 67.0 67.0 67.0 67.0 67.0 66.5 66.5 66.5
[253] 66.5 66.5 66.5 66.5 66.5 66.5 66.5 66.5 65.0 65.0 65.0 65.0
[265] 65.0 65.0 65.0 65.0 65.0 65.0 65.0 65.0 65.0 65.0 65.0 65.0
[277] 65.0 65.0 65.0 65.0 65.0 65.0 65.0 65.0 65.0 65.0 65.0 65.0
[289] 65.0 65.0 65.0 65.0 65.0 65.0 65.0 65.0 65.0 65.0 65.0 65.0
[301] 64.7 64.7 64.7 64.7 64.7 64.7 64.7 64.0 64.0 64.0 64.0 64.0
[313] 64.0 64.0 64.0 64.0 64.0 64.0 64.2 64.2 64.2 64.2 64.2 64.0
[325] 64.0 64.0 64.0 64.0 64.0 64.0 64.0 64.5 64.0 64.0 64.0 64.0
[337] 64.0 64.0 64.0 64.0 64.0 64.0 64.0 64.0 64.0 63.7 63.7 63.7
[349] 63.7 63.7 63.7 63.7 63.7 63.0 63.0 63.0 63.0 63.0 63.5 63.5
[361] 63.5 63.5 63.0 63.0 63.0 63.0 63.0 63.0 63.0 63.0 62.0 62.0
[373] 62.0 62.0 62.0 62.0 62.0 62.0 62.7 62.7 62.7 62.7 62.7 62.7
[385] 62.7 62.0 62.0 62.0 61.0 61.0 60.0 60.0 60.0 60.0 60.0 60.0
[397] 58.5 58.5 58.5 58.0 58.0 58.0 58.0 58.0 68.5 68.5 68.5 68.5
[409] 68.5 68.5 68.5 68.5 68.5 68.5 67.0 66.0 66.0 66.0 66.0 66.0
[421] 66.0 66.0 66.0 66.0 66.0 66.0 66.7 66.7 66.7 66.7 66.7 66.7
[433] 66.0 66.0 66.0 66.0 66.0 66.0 66.5 66.5 66.5 66.5 66.5 66.5
```

```

[445] 66.5 66.5 66.5 66.5 66.5 66.5 66.5 66.5 66.5 66.5 66.0 66.0 66.0
[457] 66.0 66.0 66.0 66.0 66.0 66.0 66.0 66.0 66.0 66.0 66.0 66.0 66.0
[469] 66.0 65.0 65.0 65.0 65.0 65.0 65.0 65.0 65.0 64.5 64.5 64.5 64.5
[481] 64.5 64.5 64.5 64.0 64.0 64.0 64.0 63.0 63.0 63.0 63.0 63.0
[493] 63.0 63.0 63.0 63.0 63.0 63.5 63.5 63.5 63.5 63.5 63.5 63.5
[505] 63.5 63.5 63.5 62.0 62.0 62.0 62.0 62.0 62.0 62.0 62.0 62.0
[517] 62.5 62.5 62.5 62.5 62.5 62.5 62.5 62.5 62.5 62.0 62.0 62.0
[529] 61.0 61.0 61.0 61.0 61.0 61.0 61.0 61.0 61.0 61.0 61.0 61.0
[541] 61.0 61.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.5 70.5 70.5
[553] 67.0 67.0 67.0 66.5 66.5 66.5 66.5 66.5 66.5 66.5 66.5 66.5
[565] 66.5 65.0 65.0 65.5 65.5 65.5 65.5 65.5 65.5 65.5 65.5 65.5
[577] 65.0 65.0 65.0 65.0 65.0 65.0 65.0 65.0 65.0 65.0 65.0 65.0
[589] 64.0 64.0 64.0 64.0 64.0 64.0 64.0 64.0 64.0 64.0 64.0 64.0
[601] 64.0 64.0 64.0 64.0 64.0 64.0 64.0 64.0 64.5 64.0 64.0 64.0
[613] 64.0 64.0 64.0 64.0 64.0 64.0 63.0 63.0 63.0 63.0 63.0 63.0
[625] 63.0 63.0 63.5 63.5 63.5 63.5 63.0 63.0 63.0 63.0 63.0 63.0
[637] 63.0 63.0 63.0 63.0 63.0 63.0 63.0 63.0 63.0 63.0 63.0 63.0
[649] 63.0 63.5 63.0 63.5 63.5 63.5 63.5 63.5 62.5 62.0 62.0 62.5
[661] 61.0 61.0 61.0 61.0 61.0 60.2 60.0 60.0 60.0 60.0 60.0 60.0
[673] 60.0 60.0 60.0 60.0 60.0 59.0 59.0 59.0 59.0 59.0 59.0 59.0
[685] 59.0 59.0 59.0 59.0 66.2 66.2 66.2 66.2 66.2 66.5 65.0 65.0
[697] 65.0 65.0 65.0 65.0 65.5 65.5 65.5 65.5 65.5 65.5 65.5 65.5
[709] 65.5 65.0 65.0 65.0 65.0 65.0 65.0 65.0 65.0 65.0 65.0 65.0
[721] 65.0 65.0 65.0 64.0 64.0 64.0 64.0 63.5 63.5 63.5 63.5 63.5
[733] 63.5 63.5 63.5 63.0 63.0 63.0 62.0 62.0 62.0 62.0 62.0 61.0
[745] 67.0 67.0 67.0 67.0 67.0 67.0 67.0 67.0 67.0 67.0 67.0 67.0
[757] 67.0 67.0 67.0 67.0 67.0 66.0 66.0 66.0 66.0 66.0 66.0 66.0
[769] 66.0 66.0 66.0 66.0 65.0 65.0 65.0 65.0 65.0 65.0 65.0 65.0
[781] 65.5 65.5 65.5 65.5 65.5 63.0 63.5 63.5 63.0 63.0 63.0 63.0
[793] 63.0 63.0 62.5 62.5 62.5 62.5 62.5 62.5 62.5 61.5 60.0 60.0
[805] 60.0 60.0 60.0 59.0 59.0 59.0 59.0 59.0 59.0 59.0 59.0 59.0
[817] 59.0 59.0 59.0 59.0 59.0 59.0 67.0 67.0 67.0 67.0 67.0 66.0
[829] 66.0 66.0 66.0 65.0 65.0 65.0 65.0 65.0 65.0 65.0 65.0 65.0
[841] 65.5 65.5 65.0 65.0 65.0 65.0 65.0 65.0 64.0 64.0 64.0 64.0
[853] 64.0 64.0 63.0 63.0 63.0 63.0 63.0 63.0 63.0 63.0 63.0 60.0
[865] 60.0 60.0 60.0 60.0 64.0 64.0 64.0 64.0 64.0 64.0 64.0 64.0
[877] 64.0 64.0 64.0 64.0 64.0 64.0 63.0 60.0 60.0 66.0 66.0 66.0
[889] 63.0 63.0 65.0 65.0 65.0 65.0 65.0 65.0 65.0 65.0

```

> x3

```

[1] 1 0 0 0 1 1 0 0 1 0 1 1 0 0 0 1 1 1 0 0 0 0 1 1 1 0 0 0 0 0
[32] 0 0 1 1 0 0 0 0 0 0 0 1 1 1 1 0 1 1 1 1 1 0 0 0 1 1 1 1 0 0
[63] 0 0 0 0 1 1 1 0 0 0 0 0 1 0 0 1 1 0 1 1 1 0 0 0 0 0 0 1 1 1
[94] 0 0 1 1 0 1 1 0 0 0 0 0 0 0 0 1 1 1 0 0 0 1 1 1 0 0 1 1 1 0
[125] 0 1 1 1 1 0 1 1 1 0 1 0 0 0 1 1 1 0 0 0 1 0 1 1 1 1 0 1 1 1
[156] 1 0 0 1 0 1 1 1 1 0 0 0 0 0 0 0 0 0 1 1 1 0 1 1 1 1 1 0 0 0
[187] 0 0 0 1 1 0 0 0 1 1 1 1 0 0 0 0 0 1 1 1 0 1 1 0 0 0 1 1 0 0
[218] 1 0 0 0 0 1 1 1 1 1 0 0 0 1 1 1 1 1 0 1 1 0 0 0 0 1 1 1 0 0
[249] 0 1 1 1 1 0 0 0 0 0 0 0 1 1 1 1 0 0 0 0 0 1 1 1 1 1 0 0 0 1
[280] 0 0 0 1 1 0 0 0 0 1 1 1 0 0 0 0 1 1 0 1 1 1 1 1 0 0 0 0 1 1
[311] 1 1 1 0 1 1 1 0 1 1 0 0 0 1 1 1 1 1 1 0 0 0 1 0 0 0 1 1 1 1

```

```

[342] 1 0 0 0 1 1 1 0 0 0 0 0 1 1 1 0 0 1 1 0 0 1 1 0 0 1 1 0 0 1 1
[373] 1 1 1 0 0 0 1 1 1 1 0 0 0 1 1 0 1 1 1 1 0 0 0 0 1 1 0 1 1 0 0
[404] 0 1 1 1 0 0 0 0 0 0 0 0 1 1 1 1 0 0 0 0 1 1 1 1 1 1 1 1 1 1
[435] 1 0 0 0 1 1 1 1 0 1 1 0 0 1 0 0 0 0 0 1 1 1 1 0 0 0 1 1 1 1 0
[466] 0 0 0 0 1 1 1 0 0 0 0 1 1 1 0 0 0 0 1 1 0 0 1 0 0 1 1 1 1 1 0
[497] 0 1 1 1 0 0 0 0 1 0 0 0 1 1 1 1 1 1 1 0 1 1 1 1 0 0 0 0 1 1 0
[528] 0 1 1 1 0 0 1 1 1 1 1 1 0 0 0 1 0 0 1 1 0 0 1 1 0 1 1 0 1 1 1
[559] 1 1 1 1 1 1 0 1 1 1 1 0 1 1 1 1 0 0 0 1 1 0 0 1 1 1 1 0 0 0 1
[590] 1 1 1 0 0 0 0 0 0 1 1 0 0 1 1 1 1 0 0 1 1 1 0 0 0 0 0 0 0 1 1
[621] 1 1 1 0 0 0 1 1 1 0 1 1 1 0 0 1 1 1 1 1 0 0 0 1 1 1 0 0 0 1 1
[652] 1 1 1 1 0 1 1 0 1 1 1 1 0 0 1 1 0 0 0 0 0 0 1 1 1 0 1 1 1 1 1
[683] 1 1 0 0 0 0 1 1 1 0 0 1 1 1 0 0 0 0 1 1 0 0 0 1 1 0 0 1 0 0 1
[714] 1 0 0 0 0 0 0 0 0 0 0 1 1 1 1 1 1 1 1 1 1 0 1 1 0 1 1 1 1 0 1
[745] 1 1 1 1 1 0 0 0 1 1 1 0 0 0 0 0 0 0 1 1 0 0 0 1 1 0 0 0 0 1 1 1
[776] 1 0 0 0 0 1 1 1 0 0 1 0 0 1 1 1 0 0 0 1 1 0 0 0 0 0 1 1 1 1 0
[807] 1 1 1 1 1 1 1 1 0 0 0 0 0 0 0 0 1 1 1 0 0 1 0 0 0 1 1 1 0 0 0
[838] 0 0 0 1 0 1 1 1 1 0 0 1 1 0 0 0 0 1 0 1 1 0 1 1 1 0 1 1 1 1 0
[869] 1 1 0 0 0 0 0 1 1 0 0 0 0 0 1 1 0 1 0 0 1 0 1 1 1 1 1 0 0 0

```

```
> lm(y ~ x1+x2+x3)
```

Call:

```
lm(formula = y ~ x1 + x2 + x3)
```

Coefficients:

(Intercept)	x1	x2	x3
15.3448	0.4060	0.3215	5.2260

```
> summary(lm(y ~ x1+x2+x3))
```

Call:

```
lm(formula = y ~ x1 + x2 + x3)
```

Residuals:

Min	1Q	Median	3Q	Max
-9.523	-1.440	0.117	1.473	9.114

Coefficients:

	Estimate	Std. Error	t value	Pr(> t)
(Intercept)	15.34476	2.74696	5.586	3.08e-08 ***
x1	0.40598	0.02921	13.900	< 2e-16 ***
x2	0.32150	0.03128	10.277	< 2e-16 ***
x3	5.22595	0.14401	36.289	< 2e-16 ***

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 2.154 on 894 degrees of freedom

Multiple R-squared: 0.6397, Adjusted R-squared: 0.6385

F-statistic: 529 on 3 and 894 DF, p-value: < 2.2e-16

```
> mod=lm(y ~ x1+x2+x3)
```



```

> confint(mod, level=0.95)
              2.5 %      97.5 %
(Intercept) 9.9535161 20.7360040
x1           0.3486558  0.4633002
x2           0.2601008  0.3828894
x3           4.9433183  5.5085843
> confint(mod, level=0.9)
              5 %      95 %
(Intercept) 10.8217240 19.8677960
x1           0.3578870  0.4540690
x2           0.2699878  0.3730025
x3           4.9888337  5.4630690
> plot(mod)
Hit <Return> to see next plot:
Hit <Return> to see next plot:
Hit <Return> to see next plot:
Hit <Return> to see next plot:
> par(mfrow=c(2,2)) ;plot(mod)
> plot(mod)
Hit <Return> to see next plot:
Hit <Return> to see next plot:
Hit <Return> to see next plot:
Hit <Return> to see next plot:
> par(mfrow=c(1,2)) ;plot(mod)
Hit <Return> to see next plot:
Hit <Return> to see next plot:
> par(mfrow=c(2,3)) ;plot(mod)
> y<-data1$Height
> x1<-data1$Father
> x2<-data1$Mother
> x3<- data1$Gender
> x3
  [1] M F F F M M F F M F M M F F F M M M F F F F M M M M F F F F F
 [32] F F M M F F F F F F F M M M M F M M M M M F F F F M M M M F F
 [63] F F F F M M M F F F F F M F F M M F M M M F F F F F F F M M M
 [94] F F M M F M M F F F F F F F M M M F F F M M M F F M M M M F
[125] F M M M M F M M M F M F F F M M M F F F M F M M M M F M M M M
[156] M F F M F M M M M F F F F F F F M M M F M M M M M M F F F
[187] F F F M M F F F M M M M F F F F F M M M F M M F F F M M M F F
[218] M F F F F M M M M M F F F M M M M M F M M F F F F M M M F F F
[249] F M M M M F F F F F F F M M M M F F F F F M M M M M F F F M M
[280] F F F M M F F F F M M M F F F F M M F M M M M M F F F F M M M
[311] M M M F M M M F M M F F F M M M M M M F F F M F F F M M M M M
[342] M F F F M M M F F F F F M M M F F M M F F M M F F M M F F M M
[373] M M M F F F M M M M F F F M M F M M M M F F F F M M F M M F F
[404] F M M M F F F F F F F M M M M F F F F M M M M M M M M M M M
[435] M F F F M M M M F M M F F M F F F F F M M M M F F F M M M M F
[466] F F F F M M M F F F F M M M F F F F M M F F M F F M M M M M F
[497] F M M M F F F F M F F F M M M M M M M F M M M M F F F F M M F
[528] F M M M F F M M M M M M F F F M F F M M F F M M F M M F M M M

```

```

[559] M M M M M M F M M M F M M M M F F F M M F F M M M M F F F F M
[590] M M M F F F F F F M M F F M M M M F F M M M F F F F F F M M
[621] M M M F F F M M M F M M M F F M M M M M F F F M M M F F F M M
[652] M M M M F M M F M M M M F F M M F F F F F F M M M F M M M M M
[683] M M F F F F M M M F F M M M F F F F M M F F F M M F F M F F M
[714] M F F F F F F F F F M M M M M M M M M M M F M M F M M M M F M
[745] M M M M M F F F M M M F F F F F F M M F F F M M F F F F M M M
[776] M F F F F M M M F F M F F M M M F F F M M F F F F F M M M M F
[807] M M M M M M M M F F F F F F F F M M M F F M F F F M M M F F F
[838] F F F M F M M M M F F M M F F F F M F M M F M M M F M M M M F
[869] M M F F F F F M M F F F F F M M F M F F M F M M M M M F F F

```

Levels: F M

```
> glm(y~x1+x2+factor(x3))
```

Call: glm(formula = y ~ x1 + x2 + factor(x3))

Coefficients:

(Intercept)	x1	x2	factor(x3)M
15.3448	0.4060	0.3215	5.2260

Degrees of Freedom: 897 Total (i.e. Null); 894 Residual

Null Deviance: 11520

Residual Deviance: 4149 AIC: 3933

```
> summary(glm(y~x1+x2+factor(x3)))
```

Call:

```
glm(formula = y ~ x1 + x2 + factor(x3))
```

Deviance Residuals:

Min	1Q	Median	3Q	Max
-9.523	-1.440	0.117	1.473	9.114

Coefficients:

	Estimate	Std. Error	t value	Pr(> t)
(Intercept)	15.34476	2.74696	5.586	3.08e-08 ***
x1	0.40598	0.02921	13.900	< 2e-16 ***
x2	0.32150	0.03128	10.277	< 2e-16 ***
factor(x3)M	5.22595	0.14401	36.289	< 2e-16 ***

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

(Dispersion parameter for gaussian family taken to be 4.641121)

Null deviance: 11515.1 on 897 degrees of freedom

Residual deviance: 4149.2 on 894 degrees of freedom

AIC: 3932.8

Number of Fisher Scoring iterations: 2

```
> x3<-relevel(factor(x3),ref="M")
```

```
> mod1<-glm(y~x1+x2+factor(x3))
> summary(mod1)
```

Call:

```
glm(formula = y ~ x1 + x2 + factor(x3))
```

Deviance Residuals:

	Min	1Q	Median	3Q	Max
	-9.523	-1.440	0.117	1.473	9.114

Coefficients:

	Estimate	Std. Error	t value	Pr(> t)
(Intercept)	20.57071	2.74067	7.506	1.48e-13 ***
x1	0.40598	0.02921	13.900	< 2e-16 ***
x2	0.32150	0.03128	10.277	< 2e-16 ***
factor(x3)F	-5.22595	0.14401	-36.289	< 2e-16 ***

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

(Dispersion parameter for gaussian family taken to be 4.641121)

Null deviance: 11515.1 on 897 degrees of freedom
Residual deviance: 4149.2 on 894 degrees of freedom
AIC: 3932.8

Number of Fisher Scoring iterations: 2

```
> install.packages("gdata")
```

--- Please select a CRAN mirror for use in this session ---

trying URL 'https://mirrors.sorengard.com/cran/bin/macosx/el-capitan/contrib/3.4/gdata_2.18.0.tgz'

Content type 'application/octet-stream' length 1141723 bytes (1.1 MB)

=====

downloaded 1.1 MB

The downloaded binary packages are in

/var/folders/bt/640pc4590213xhch2_2lhx9w0000gn/T//RtmpD39iiq/

downloaded_packages

```
> library("gdata")
```

gdata: read.xls support for 'XLS' (Excel 97-2004) files

gdata: ENABLED.

gdata: read.xls support for 'XLSX' (Excel 2007+) files

gdata: ENABLED.

Attaching package: 'gdata'

The following object is masked from 'package:stats':

nobs

The following object is masked from 'package:utils':

object.size

The following object is masked from 'package:base':

startsWith

```
> read.xls("~/Desktop/heat.xlsx")
```

	No.	X1	X2	X3	X4	Y
1	1	7	26	6	60	78.5
2	2	1	29	15	52	74.3
3	3	11	56	8	20	104.3
4	4	11	31	8	47	87.6
5	5	7	52	6	33	95.9
6	6	11	55	9	22	109.2
7	7	3	71	17	6	102.7
8	8	1	31	22	44	72.5
9	9	2	54	18	22	93.1
10	10	21	47	4	26	1159.0
11	11	1	40	23	34	83.8
12	12	11	66	9	12	113.3
13	13	10	68	8	12	109.4

```
> library(leaps)
```

```
> data1=read.xls("~/Desktop/heat.xlsx")
```

```
data
```

```
> data1
```

	No.	X1	X2	X3	X4	Y
1	1	7	26	6	60	78.5
2	2	1	29	15	52	74.3
3	3	11	56	8	20	104.3
4	4	11	31	8	47	87.6
5	5	7	52	6	33	95.9
6	6	11	55	9	22	109.2
7	7	3	71	17	6	102.7
8	8	1	31	22	44	72.5
9	9	2	54	18	22	93.1
10	10	21	47	4	26	1159.0
11	11	1	40	23	34	83.8
12	12	11	66	9	12	113.3
13	13	10	68	8	12	109.4

```
> leaps1<-regsubsets(Y~X1+X2+X3+X4,data=data1,nbest=10)
```

```
> summary(leaps1)
```

Subset selection object

Call: regsubsets.formula(Y ~ X1 + X2 + X3 + X4, data = data1, nbest = 10)

4 Variables (and intercept)

Forced in Forced out

```

X1      FALSE      FALSE
X2      FALSE      FALSE
X3      FALSE      FALSE
X4      FALSE      FALSE
10 subsets of each size up to 4
Selection Algorithm: exhaustive
      X1 X2 X3 X4
1 ( 1 ) "*" " " " " " "
1 ( 2 ) " " " " "*" " "
1 ( 3 ) " " " " " " "*"
1 ( 4 ) " " "*" " " " "
2 ( 1 ) "*" " " "*" " "
2 ( 2 ) "*" "*" " " " "
2 ( 3 ) "*" " " " " "*"
2 ( 4 ) " " "*" " " "*"
2 ( 5 ) " " " " "*" "*"
2 ( 6 ) " " "*" "*" " "
3 ( 1 ) "*" " " "*" "*"
3 ( 2 ) "*" "*" "*" " "
3 ( 3 ) "*" "*" " " "*"
3 ( 4 ) " " "*" "*" "*"
4 ( 1 ) "*" "*" "*" "*"
> plot(leaps1, scale="r2")
> plot(leaps1, scale="adjr2")
> lm(Y~X1+X3)
Error in eval(predvars, data, env) : object 'Y' not found
> lm(Y~X1+X3,data=data1)

```

```

Call:
lm(formula = Y ~ X1 + X3, data = data1)

```

```

Coefficients:
(Intercept)          X1          X3
    -635.31      62.28      29.42

```

```
> summary(lm(Y~X1+X3,data=data1))
```

```

Call:
lm(formula = Y ~ X1 + X3, data = data1)

```

```

Residuals:
    Min       1Q   Median       3Q      Max
-205.36 -180.84   -1.74   101.32   368.74

```

```

Coefficients:
            Estimate Std. Error t value Pr(>|t|)
(Intercept)  -635.31    299.52  -2.121  0.05992 .
X1             62.28     16.86   3.694  0.00415 **
X3             29.42     15.48   1.900  0.08658 .
---

```

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 194.6 on 10 degrees of freedom
Multiple R-squared: 0.6394, Adjusted R-squared: 0.5673
F-statistic: 8.865 on 2 and 10 DF, p-value: 0.006098

```
> summary(lm(Y~X1+X3+X4,data=data1))
```

Call:

```
lm(formula = Y ~ X1 + X3 + X4, data = data1)
```

Residuals:

	Min	1Q	Median	3Q	Max
	-264.90	-147.20	-45.63	140.49	326.74

Coefficients:

	Estimate	Std. Error	t value	Pr(> t)	
(Intercept)	-856.493	373.881	-2.291	0.04771	*
X1	69.369	18.330	3.784	0.00432	**
X3	34.507	16.326	2.114	0.06370	.
X4	3.614	3.650	0.990	0.34796	

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 194.8 on 9 degrees of freedom
Multiple R-squared: 0.6748, Adjusted R-squared: 0.5664
F-statistic: 6.226 on 3 and 9 DF, p-value: 0.01412

```
> plot(leaps1, scale="Cp")
```

```
> plot(leaps1, scale="bic")
```

```
> step(lm(Y~X1+X2+X3+X4), data=data1)
```

Error in eval(predvars, data, env) : object 'Y' not found

```
> library(MASS)
```

```
> step(lm(Y~X1+X2+X3+X4), data=data1)
```

Error in eval(predvars, data, env) : object 'Y' not found

```
> data1
```

	No.	X1	X2	X3	X4	Y
1	1	7	26	6	60	78.5
2	2	1	29	15	52	74.3
3	3	11	56	8	20	104.3
4	4	11	31	8	47	87.6
5	5	7	52	6	33	95.9
6	6	11	55	9	22	109.2
7	7	3	71	17	6	102.7
8	8	1	31	22	44	72.5
9	9	2	54	18	22	93.1
10	10	21	47	4	26	1159.0
11	11	1	40	23	34	83.8
12	12	11	66	9	12	113.3
13	13	10	68	8	12	109.4

```
> step(lm(Y~X1+X2+X3+X4), data=data1))
Error: unexpected ')' in "step(lm(Y~X1+X2+X3+X4), data=data1))"
> lm(Y~X1+X2+X3+X4), data=data1)
Error: unexpected ',' in "lm(Y~X1+X2+X3+X4),"
> lm(Y~X1+X2+X3+X4, data=data1)
```

Call:

```
lm(formula = Y ~ X1 + X2 + X3 + X4, data = data1)
```

Coefficients:

(Intercept)	X1	X2	X3	X4
-4329.47	104.55	35.95	70.59	38.76

```
> step(lm(Y~X1+X2+X3+X4, data=data1))
```

Start: AIC=141.71

Y ~ X1 + X2 + X3 + X4

	Df	Sum of Sq	RSS	AIC
- X2	1	14764	341378	140.28
- X4	1	17881	344496	140.40
- X3	1	52338	378952	141.64
<none>			326614	141.71
- X1	1	117910	444524	143.72

Step: AIC=140.29

Y ~ X1 + X3 + X4

	Df	Sum of Sq	RSS	AIC
- X4	1	37189	378567	139.63
<none>			341378	140.28
- X3	1	169447	510825	143.53
- X1	1	543234	884612	150.66

Step: AIC=139.63

Y ~ X1 + X3

	Df	Sum of Sq	RSS	AIC
<none>			378567	139.63
- X3	1	136710	515278	141.64
- X1	1	516693	895261	148.82

Call:

```
lm(formula = Y ~ X1 + X3, data = data1)
```

Coefficients:

(Intercept)	X1	X3
-635.31	62.28	29.42

>