163	1	52.0000
164	1	52.0000
165	1	26.5500
166	1	90.0000
167	1	30.6958
168	1	90.0000
169	1	80.0000
170	1	28.7125
171	1	0.0000
172	1	26.0000
173	1	26.0000
174	1	211.5000
175	1	29.7000
176	1	51.8625
177	1	51.8625
178	1	52.5542
179	1	52.5542
180	1	26.5500
181	1	211.3375
182	1	25.9292
183	1	106.4250
184	1	512.3292
185	1	27.7208
186	1	26.5500
187	1	27.7208
188	1	39.4000
189	1	39.4000
190	1	30.0000
191	1	77.9583
192	1	45.5000
193	1	146.5208
194	1	211.3375
195	1	26.0000
196	1	86.5000
197	1	29.7000
198	1	53.1000
199	1	53.1000
200	1	49.5042
201	1	75.2417
202	1	51.8625
203	1	26.2875
204	1	82.1708
205	1	82.1708
206	1	26.5500
207	1	90.0000
208	1	90.0000
209	1	90.0000
210	1	57.7500
211	1	30.5000
212	1	42.4000
213	1	29.7000
214	1	113.2750
215	1	113.2750
216	1	113.2750
217	1	26.2833
218	1	26.0000
219	1	108.9000
220	1	25.7417
221	1	61.9792
222	1	61.9792
223	1	27.7208
224	1	0.0000
225	1	28.5000

226	1	93.5000
227	1	66.6000
228	1	66.6000
229	1	108.9000
230	1	108.9000
231	1	93.5000
232	1	30.5000
233	1	52.0000
234	1	83.1583
235	1	0.0000
236	1	39.6000
237	1	135.6333
238	1	227.5250
239	1	211.3375
240	1	50.4958
241	1	26.5500
242	1	50.0000
243	1	27.7208
244	1	79.2000
245	1	40.1250
246	1	86.5000
247	1	59.4000
248	1	59.4000
249	1	26.5500
250	1	262.3750
251	1	262.3750
252	1	262.3750
253	1	262.3750
254	1	262.3750
255	1	30.5000
256	1	69.3000
257	1	26.0000
258	1	57.7500
259	1	31.0000
260	1	26.5500
261	1	153.4625
262	1	26.2875
263	1	55.9000
264	1	55.9000
265	1	35.5000
266	1	35.5000
267	1	26.5500
268	1	30.6958
269	1	60.0000
270	1	26.0000
271	1	60.0000
272	1	82.2667
273	1	82.2667
274	1	134.5000
275	1	134.5000
276	1	134.5000
277	1	146.5208
278	1	146.5208
279	1	30.5000
280	1	26.5500
281	1	55.4417
282	1	55.4417
283	1	78.2667
284	1	27.7208
285	1	80.0000
286	1	221.7792
287	1	221.7792
288	1	32.3208

```
289      1  25.9292
290      1  79.6500
291      1  79.6500
292      1  79.6500
293      1  52.0000
294      1  52.0000
295      1 110.8833
296      1 110.8833
297      1 110.8833
298      1  79.2000
299      1  28.5375
300      1  27.7208
301      1  33.5000
302      1  34.0208
303      1 512.3292
304      1  75.2500
305      1  75.2500
306      1  26.5500
307      1  77.2875
308      1  77.2875
309      1 135.6333
310      1 164.8667
311      1 164.8667
312      1 164.8667
313      1 211.5000
314      1 211.5000
315      1 211.5000
316      1  26.5500
317      1  61.3792
318      1  61.3792
319      1  35.0000
320      1 134.5000
321      1  35.5000
322      1  26.5500
323      1 135.6333
> titanic_class2 <- sqldf("SELECT * FROM titanic_fare
+                          WHERE pclass = '2'")
> titanic_class2
    pclass    fare
1        2 24.0000
2        2 24.0000
3        2 13.0000
4        2 11.5000
5        2 10.5000
6        2 26.0000
7        2 26.0000
8        2 13.0000
9        2 11.5000
10       2 10.5000
11       2 13.0000
12       2 10.5000
13       2 12.5250
14       2 26.0000
15       2 26.0000
16       2 26.0000
17       2 39.0000
18       2 39.0000
19       2 39.0000
20       2 39.0000
21       2 13.0000
22       2 13.0000
23       2 13.0000
24       2 13.0000
```

25	2	13.0000
26	2	13.0000
27	2	13.0000
28	2	39.0000
29	2	39.0000
30	2	39.0000
31	2	26.0000
32	2	26.0000
33	2	13.0000
34	2	13.0000
35	2	13.0000
36	2	13.0000
37	2	29.0000
38	2	29.0000
39	2	29.0000
40	2	21.0000
41	2	0.0000
42	2	13.0000
43	2	26.0000
44	2	26.0000
45	2	13.5000
46	2	26.0000
47	2	26.0000
48	2	30.0000
49	2	30.0000
50	2	26.0000
51	2	26.0000
52	2	10.5000
53	2	13.0000
54	2	10.5000
55	2	26.2500
56	2	26.2500
57	2	26.2500
58	2	10.5000
59	2	13.0000
60	2	21.0000
61	2	11.5000
62	2	0.0000
63	2	36.7500
64	2	73.5000
65	2	36.7500
66	2	13.0000
67	2	13.0000
68	2	73.5000
69	2	27.7208
70	2	27.7208
71	2	31.5000
72	2	73.5000
73	2	23.0000
74	2	23.0000
75	2	26.0000
76	2	32.5000
77	2	32.5000
78	2	32.5000
79	2	13.8583
80	2	13.8583
81	2	13.0000
82	2	13.0000
83	2	13.0000
84	2	26.0000
85	2	26.0000
86	2	10.5000
87	2	13.0000

88	2	0.0000
89	2	13.0000
90	2	26.0000
91	2	21.0000
92	2	21.0000
93	2	13.0000
94	2	26.0000
95	2	10.5000
96	2	10.5000
97	2	11.5000
98	2	11.5000
99	2	13.5000
100	2	13.0000
101	2	13.0000
102	2	13.0000
103	2	13.0000
104	2	13.0000
105	2	14.5000
106	2	14.5000
107	2	13.0000
108	2	33.0000
109	2	33.0000
110	2	10.5000
111	2	10.5000
112	2	26.2500
113	2	26.2500
114	2	26.2500
115	2	65.0000
116	2	65.0000
117	2	65.0000
118	2	65.0000
119	2	16.0000
120	2	73.5000
121	2	73.5000
122	2	73.5000
123	2	13.0000
124	2	23.0000
125	2	11.5000
126	2	13.0000
127	2	23.0000
128	2	13.0000
129	2	26.0000
130	2	26.0000
131	2	73.5000
132	2	13.0000
133	2	26.0000
134	2	26.0000
135	2	12.2750
136	2	10.5000
137	2	27.0000
138	2	27.0000
139	2	15.0000
140	2	31.5000
141	2	31.5000
142	2	10.5000
143	2	13.7917
144	2	26.0000
145	2	26.0000
146	2	21.0000
147	2	12.3500
148	2	12.3500
149	2	13.5000
150	2	12.3500

151	2	0.0000
152	2	10.5000
153	2	26.0000
154	2	26.0000
155	2	10.7083
156	2	41.5792
157	2	41.5792
158	2	41.5792
159	2	41.5792
160	2	12.0000
161	2	33.0000
162	2	10.5000
163	2	12.8750
164	2	10.5000
165	2	12.3500
166	2	26.0000
167	2	26.0000
168	2	10.5000
169	2	15.0458
170	2	37.0042
171	2	37.0042
172	2	37.0042
173	2	15.5792
174	2	13.0000
175	2	16.0000
176	2	13.5000
177	2	13.0000
178	2	26.0000
179	2	19.5000
180	2	19.5000
181	2	10.5000
182	2	13.0000
183	2	13.0000
184	2	10.5000
185	2	13.0000
186	2	14.0000
187	2	26.0000
188	2	10.5000
189	2	9.6875
190	2	30.0708
191	2	30.0708
192	2	26.0000
193	2	26.0000
194	2	26.0000
195	2	13.0000
196	2	36.7500
197	2	13.5000
198	2	13.8625
199	2	10.5000
200	2	13.0000
201	2	10.5000
202	2	13.8625
203	2	10.5000
204	2	13.8583
205	2	10.5000
206	2	0.0000
207	2	26.0000
208	2	10.5000
209	2	15.0500
210	2	13.0000
211	2	21.0000
212	2	26.0000
213	2	21.0000

214	2	13.0000
215	2	13.0000
216	2	12.7375
217	2	15.0333
218	2	26.0000
219	2	26.0000
220	2	26.0000
221	2	10.5000
222	2	21.0000
223	2	21.0000
224	2	13.0000
225	2	15.0458
226	2	18.7500
227	2	18.7500
228	2	18.7500
229	2	10.5000
230	2	10.5000
231	2	10.5000
232	2	13.0000
233	2	13.0000
234	2	26.0000
235	2	26.0000
236	2	13.0000
237	2	36.7500
238	2	13.0000
239	2	13.5000
240	2	12.3500
241	2	10.5000
242	2	13.0000
243	2	13.0000
244	2	15.0458
245	2	10.5000
246	2	13.0000
247	2	65.0000
248	2	10.5000
249	2	13.0000
250	2	12.6500
251	2	10.5000
252	2	21.0000
253	2	21.0000
254	2	13.0000
255	2	21.0000
256	2	21.0000
257	2	10.5000
258	2	21.0000
259	2	0.0000
260	2	15.7500
261	2	15.7500
262	2	13.0000
263	2	26.0000
264	2	26.0000
265	2	23.0000
266	2	23.0000
267	2	23.0000
268	2	27.7500
269	2	27.7500
270	2	27.7500
271	2	27.7500
272	2	10.5000
273	2	12.8750
274	2	13.0000
275	2	13.0000
276	2	13.5000

```
277      2 13.0000
> titanic_class3 <- sqldf("SELECT * FROM titanic_fare
+                         WHERE pclass = '3'")
> titanic_class3
    pclass    fare
1        3  7.5500
2        3 20.2500
3        3 20.2500
4        3 20.2500
5        3  7.6500
6        3  7.6500
7        3  7.9250
8        3  7.2292
9        3  7.2500
10       3  8.0500
11       3  9.4750
12       3  9.3500
13       3  9.3500
14       3 18.7875
15       3  7.8875
16       3  7.9250
17       3  7.0500
18       3  7.0500
19       3  8.0500
20       3  8.3000
21       3 22.5250
22       3  7.8542
23       3 31.2750
24       3 31.2750
25       3 31.2750
26       3  7.9250
27       3  7.7750
28       3 31.2750
29       3 31.2750
30       3 31.2750
31       3  7.7958
32       3  7.7750
33       3 31.2750
34       3  7.8542
35       3  7.8958
36       3 17.8000
37       3 17.8000
38       3  7.7750
39       3  7.0500
40       3 31.3875
41       3 31.3875
42       3 31.3875
43       3 31.3875
44       3 31.3875
45       3 31.3875
46       3  7.7958
47       3 31.3875
48       3  7.2250
49       3  7.2250
50       3  7.0500
51       3 14.4583
52       3  7.2250
53       3  7.8542
54       3  7.2292
55       3  7.2250
56       3 15.8500
57       3 15.8500
58       3 19.2583
```

59	3	19.2583
60	3	19.2583
61	3	19.2583
62	3	8.0500
63	3	7.2250
64	3	7.8958
65	3	7.2292
66	3	14.4542
67	3	14.4542
68	3	7.8792
69	3	8.0500
70	3	8.0500
71	3	7.7750
72	3	9.3500
73	3	7.2292
74	3	4.0125
75	3	56.4958
76	3	7.7750
77	3	7.7500
78	3	7.8958
79	3	15.2458
80	3	15.2458
81	3	7.2250
82	3	15.2458
83	3	7.7500
84	3	15.5000
85	3	15.5000
86	3	16.1000
87	3	7.7250
88	3	7.8542
89	3	7.0458
90	3	7.2500
91	3	7.7958
92	3	8.0500
93	3	7.2833
94	3	7.8208
95	3	6.7500
96	3	7.8792
97	3	8.6625
98	3	8.6625
99	3	8.6625
100	3	8.6625
101	3	8.6625
102	3	8.6625
103	3	7.7500
104	3	7.7500
105	3	8.0500
106	3	14.4583
107	3	14.4583
108	3	7.7958
109	3	7.8542
110	3	7.7500
111	3	7.7500
112	3	7.2500
113	3	8.0500
114	3	7.7333
115	3	56.4958
116	3	8.0500
117	3	14.4542
118	3	14.4542
119	3	7.0500
120	3	8.0500
121	3	7.2500

122	3	7.4958
123	3	7.4958
124	3	7.7333
125	3	7.7500
126	3	7.7500
127	3	7.6292
128	3	7.7500
129	3	8.0500
130	3	7.8958
131	3	7.8958
132	3	7.8958
133	3	8.0500
134	3	15.9000
135	3	15.9000
136	3	15.9000
137	3	7.2500
138	3	8.1583
139	3	16.1000
140	3	16.1000
141	3	8.6625
142	3	7.2250
143	3	8.0500
144	3	10.5167
145	3	10.1708
146	3	6.9500
147	3	7.7500
148	3	14.4000
149	3	14.4000
150	3	14.4000
151	3	7.8958
152	3	7.8958
153	3	24.1500
154	3	8.0500
155	3	24.1500
156	3	8.0500
157	3	16.1000
158	3	16.1000
159	3	17.4000
160	3	17.4000
161	3	9.5000
162	3	9.5000
163	3	20.5750
164	3	20.5750
165	3	20.5750
166	3	20.5750
167	3	7.8958
168	3	7.8958
169	3	7.8958
170	3	7.2500
171	3	7.2500
172	3	7.8792
173	3	7.8958
174	3	8.6625
175	3	7.8958
176	3	7.2292
177	3	7.7500
178	3	8.0500
179	3	12.4750
180	3	7.7500
181	3	8.0500
182	3	7.8958
183	3	7.7500
184	3	7.5500

185	3	13.9000
186	3	13.9000
187	3	7.7750
188	3	7.7750
189	3	6.9750
190	3	7.2250
191	3	7.2292
192	3	7.2292
193	3	7.2292
194	3	7.2500
195	3	12.4750
196	3	7.2250
197	3	15.1000
198	3	7.7500
199	3	7.0500
200	3	7.7958
201	3	7.7500
202	3	7.7500
203	3	6.9500
204	3	7.8792
205	3	7.7500
206	3	56.4958
207	3	34.3750
208	3	34.3750
209	3	8.0500
210	3	34.3750
211	3	34.3750
212	3	34.3750
213	3	7.7500
214	3	7.2500
215	3	7.7417
216	3	14.5000
217	3	7.8958
218	3	8.0500
219	3	7.7333
220	3	7.7500
221	3	20.5250
222	3	20.5250
223	3	7.8500
224	3	20.5250
225	3	7.0500
226	3	46.9000
227	3	46.9000
228	3	46.9000
229	3	46.9000
230	3	46.9000
231	3	46.9000
232	3	46.9000
233	3	46.9000
234	3	8.0500
235	3	8.3625
236	3	8.0500
237	3	9.8458
238	3	7.9250
239	3	7.9250
240	3	7.7750
241	3	8.8500
242	3	7.7333
243	3	19.9667
244	3	19.9667
245	3	15.8500
246	3	15.8500
247	3	9.5000

248	3	7.2292
249	3	14.1083
250	3	7.8542
251	3	7.8542
252	3	14.1083
253	3	7.5500
254	3	7.2500
255	3	6.8583
256	3	18.7875
257	3	7.7500
258	3	6.9750
259	3	56.4958
260	3	6.7500
261	3	7.9250
262	3	7.9250
263	3	8.9625
264	3	7.8958
265	3	7.7750
266	3	7.7500
267	3	12.2875
268	3	12.2875
269	3	6.4500
270	3	22.5250
271	3	7.9250
272	3	7.7500
273	3	8.0500
274	3	7.6500
275	3	7.8875
276	3	7.2292
277	3	7.8958
278	3	7.9250
279	3	7.9250
280	3	7.8958
281	3	7.8958
282	3	7.7958
283	3	7.0500
284	3	7.8542
285	3	7.8542
286	3	7.0542
287	3	7.7500
288	3	8.1125
289	3	6.4958
290	3	7.7750
291	3	7.7958
292	3	8.6542
293	3	7.7750
294	3	7.8542
295	3	11.1333
296	3	11.1333
297	3	0.0000
298	3	7.7750
299	3	0.0000
300	3	11.1333
301	3	23.4500
302	3	23.4500
303	3	23.4500
304	3	23.4500
305	3	7.8958
306	3	7.8542
307	3	7.8542
308	3	9.8250
309	3	9.8250
310	3	7.9250

311	3	7.1250
312	3	8.4333
313	3	7.8958
314	3	7.7958
315	3	7.8542
316	3	7.5208
317	3	13.4167
318	3	13.4167
319	3	7.2292
320	3	7.2292
321	3	7.7500
322	3	7.2500
323	3	7.7500
324	3	7.7500
325	3	7.8292
326	3	8.0500
327	3	7.7500
328	3	14.4542
329	3	14.4542
330	3	7.7500
331	3	7.7500
332	3	7.7375
333	3	8.6625
334	3	8.6625
335	3	22.0250
336	3	22.0250
337	3	22.0250
338	3	12.1833
339	3	7.8542
340	3	12.1833
341	3	7.8958
342	3	7.2292
343	3	7.2250
344	3	9.5875
345	3	7.8958
346	3	56.4958
347	3	56.4958
348	3	7.2500
349	3	7.7500
350	3	56.4958
351	3	9.4833
352	3	7.7750
353	3	7.7750
354	3	7.2250
355	3	25.4667
356	3	25.4667
357	3	25.4667
358	3	25.4667
359	3	25.4667
360	3	7.9250
361	3	6.4375
362	3	15.5000
363	3	15.5000
364	3	0.0000
365	3	24.1500
366	3	9.5000
367	3	7.7750
368	3	7.7500
369	3	15.5500
370	3	15.5500
371	3	7.9250
372	3	7.8792
373	3	56.4958

374	3	7.5500
375	3	16.1000
376	3	16.1000
377	3	7.8792
378	3	7.2500
379	3	8.6625
380	3	7.0542
381	3	7.8542
382	3	7.5792
383	3	7.8958
384	3	7.5500
385	3	7.7500
386	3	7.1417
387	3	7.1250
388	3	7.8792
389	3	7.7500
390	3	8.0500
391	3	7.9250
392	3	7.2292
393	3	7.7500
394	3	7.7375
395	3	7.2292
396	3	7.8958
397	3	7.8958
398	3	7.2250
399	3	7.8958
400	3	7.7500
401	3	7.7500
402	3	23.2500
403	3	23.2500
404	3	23.2500
405	3	7.7875
406	3	15.5000
407	3	7.8792
408	3	8.0292
409	3	7.7500
410	3	7.7500
411	3	16.1000
412	3	16.1000
413	3	7.7500
414	3	8.0500
415	3	8.0500
416	3	8.0500
417	3	7.7500
418	3	7.7750
419	3	8.0500
420	3	7.8958
421	3	7.8958
422	3	7.8958
423	3	7.8958
424	3	7.8792
425	3	7.6500
426	3	12.4750
427	3	12.4750
428	3	8.0500
429	3	24.1500
430	3	24.1500
431	3	8.4583
432	3	8.0500
433	3	7.7500
434	3	7.7750
435	3	15.2458
436	3	15.2458

437	3	15.2458
438	3	7.2292
439	3	8.0500
440	3	7.7333
441	3	7.7500
442	3	8.0500
443	3	15.5000
444	3	15.5000
445	3	15.5000
446	3	7.7500
447	3	7.8958
448	3	7.2250
449	3	15.7417
450	3	15.7417
451	3	15.7417
452	3	8.0500
453	3	7.8958
454	3	7.2292
455	3	7.7500
456	3	7.8958
457	3	11.2417
458	3	11.2417
459	3	7.9250
460	3	8.0500
461	3	7.7750
462	3	7.8542
463	3	7.8542
464	3	7.1250
465	3	7.9250
466	3	7.8000
467	3	7.2292
468	3	7.7500
469	3	6.2375
470	3	15.5000
471	3	7.8292
472	3	15.5000
473	3	7.7333
474	3	7.7500
475	3	7.7500
476	3	9.2250
477	3	7.7500
478	3	7.7500
479	3	7.8792
480	3	7.7750
481	3	7.7500
482	3	7.8292
483	3	3.1708
484	3	22.5250
485	3	8.4042
486	3	7.3125
487	3	7.8542
488	3	7.8542
489	3	7.7750
490	3	9.2250
491	3	8.6625
492	3	8.6625
493	3	8.6625
494	3	9.2167
495	3	8.6833
496	3	7.6292
497	3	21.0750
498	3	21.0750
499	3	21.0750

```
500      3 21.0750
 [ reached getOption("max.print") -- omitted 209 rows ]
>
>
> boxplot(titanic_class1$fare,titanic_class2$fare,titanic_class3$fare, xlab =
"CLASSES", ylab = "FARES", main = "CLASSWISE FARES")
>
> #. Is there any association with Passenger class and
> #gender?
> #  Note- show a stacked bar chart
>
> titanic_gender_class <- titanicdf[c(1,4)]
> library(sqldf)
> class1_female <- sqldf("SELECT *
+       FROM titanic_gender_class
+       WHERE pclass = '1' AND `sex` = 'female'")
>
> class1_male <- sqldf("SELECT *
+                       FROM titanic_gender_class
+                       WHERE pclass = '1' AND `sex` = 'male'")
> class2_female <- sqldf("SELECT *
+       FROM titanic_gender_class
+                       WHERE pclass = '2' AND `sex` = 'female'")
> class2_male <- sqldf("SELECT *
+       FROM titanic_gender_class
+                       WHERE pclass = '2' AND `sex` = 'male'")
> class3_male <- sqldf("SELECT *
+       FROM titanic_gender_class
+                       WHERE pclass = '3' AND `sex` = 'male'")
> class3_female <- sqldf("SELECT *
+       FROM titanic_gender_class
+                     WHERE pclass = '3' AND `sex` = 'female'")
>
> #counts of classwise male and female
> class1_fcount <- nrow(class1_female)
> class1_mcount <-nrow(class1_male)
> class2fcount  <-nrow(class2_female)
> class2mcount  <-nrow(class2_male)
> class3fcount  <-nrow(class3_female)
> class3mcount  <-nrow(class3_male)
>
> #rbinding m and f under same class
> class1<- rbind(class1_fcount,class1_mcount)
> class2<- rbind(class2fcount,class2mcount)
> class3<- rbind(class3fcount,class3mcount)
>
> #cbinding the 3 classes
> all_classes<- cbind(class1,class2,class3)
> colnames(all_classes) <- c("Class 1","Class 2","Class 3")
> row.names(all_classes) <- c("Count of Female", "Count of Male")
> barplot(as.matrix(all_classes),xlab = "CLASSES",ylab = "GENDER",
+         main = "Classwise Gender Count",col = c("red","blue"))
> legend("topleft",
+        c("Female","Male"),
+        fill = c("red","blue")
+ )
```