

# Worksheet\_Porras#6

Porras, Christian BSIT 2-C

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1. Create a data frame for the table below. Show your solution.
  - a. Compute the descriptive statistics using different packages (Hmisc and pastecs). Write the codes and its result.

```
studentScore <- data.frame(  
  Student = c(1:10),  
  Pre_test = c(55,54,47,57,51,61,57,54,63,58),  
  Post_test = c(61,60,56,63,56,63,59,56,62,61)  
)  
studentScore
```

##	Student	Pre_test	Post_test
## 1	1	55	61
## 2	2	54	60
## 3	3	47	56
## 4	4	57	63
## 5	5	51	56
## 6	6	61	63
## 7	7	57	59
## 8	8	54	56
## 9	9	63	62
## 10	10	58	61

```
#install.packages("pastecs")  
#install.packages("Hmisc")
```

```
library(pastecs)  
library(Hmisc)
```

```
##  
## Attaching package: 'Hmisc'  
  
## The following objects are masked from 'package:base':  
##  
##   format.pval, units
```

```
pastecsStats <- stat.desc(studentScore)  
pastecsStats
```

##	Student	Pre_test	Post_test
## nbr.val	10.0000000	10.00000000	10.00000000
## nbr.null	0.0000000	0.00000000	0.00000000
## nbr.na	0.0000000	0.00000000	0.00000000
## min	1.0000000	47.00000000	56.00000000
## max	10.0000000	63.00000000	63.00000000

```
## range      9.0000000 16.0000000  7.0000000
## sum        55.0000000 557.0000000 597.0000000
## median     5.5000000 56.0000000 60.5000000
## mean       5.5000000 55.7000000 59.7000000
## SE.mean    0.9574271  1.46855938  0.89504811
## CI.mean.0.95 2.1658506  3.32211213  2.02473948
## var        9.1666667 21.56666667  8.01111111
## std.dev    3.0276504  4.64399254  2.83039063
## coef.var   0.5504819  0.08337509  0.04741023
```

```
hmiscStats <- Hmisc::describe(studentScore[,c("Pre_test", "Post_test")])
hmiscStats
```

```
## studentScore[, c("Pre_test", "Post_test")]
##
## 2 Variables      10 Observations
## -----
## Pre_test
##      n missing distinct      Info      Mean      Gmd
##      10      0         8    0.988     55.7     5.444
##
## Value      47 51 54 55 57 58 61 63
## Frequency   1  1  2  1  2  1  1  1
## Proportion 0.1 0.1 0.2 0.1 0.2 0.1 0.1 0.1
##
## For the frequency table, variable is rounded to the nearest 0
## -----
## Post_test
##      n missing distinct      Info      Mean      Gmd
##      10      0         6    0.964     59.7     3.311
##
## Value      56 59 60 61 62 63
## Frequency   3  1  1  2  1  2
## Proportion 0.3 0.1 0.1 0.2 0.1 0.2
##
## For the frequency table, variable is rounded to the nearest 0
## -----
```

2. The Department of Agriculture was studying the effects of several levels of a fertilizer on the growth of a plant. For some analyses, it might be useful to convert the fertilizer levels to an ordered factor.

```
#install.packages("dplyr")
```

```
library(dplyr)
```

```
##
## Attaching package: 'dplyr'
##
## The following objects are masked from 'package:Hmisc':
##
##      src, summarize
##
## The following objects are masked from 'package:pastecs':
##
##      first, last
##
## The following objects are masked from 'package:stats':
##
```

```
##      filter, lag
## The following objects are masked from 'package:base':
##
##      intersect, setdiff, setequal, union

lvlFertil <- c(10,10,10, 20,20,50,10,20,10,50,20,50,20,10)
orderedFertillvl <- factor(lvlFertil, levels = unique(lvlFertil))

summaryFertilizer <- summary(orderedFertillvl)
summaryFertilizer
```

```
## 10 20 50
##   6  5  3
```

3. Abdul Hassan, president of Floor Coverings Unlimited, has asked you to study the exercise levels undertaken by 10 subjects were “l”, “n”, “n”, “i”, “l”, “l”, “n”, “n”, “i”, “l” ; n=none, l=light, i=intense

a. What is the best way to represent this in R?

```
exercise_lvl <- c("l", "n", "n", "i", "l", "l", "n", "n", "i", "l")

factor_exercise <- factor(exercise_lvl, levels = c("n", "l", "i"))

factor_exercise
```

```
## [1] l n n i l l n n i l
## Levels: n l i
```

4. Sample of 30 tax accountants from all the states and territories of Australia and their individual state of origin is specified by a character vector of state mnemonics as: state <- c(“tas”, “sa”, “qld”, “nsw”, “nsw”, “nt”, “wa”, “wa”, “qld”, “vic”, “nsw”, “vic”, “qld”, “qld”, “sa”, “tas”, “sa”, “nt”, “wa”, “vic”, “qld”, “nsw”, “nsw”, “wa”, “sa”, “act”, “nsw”, “vic”, “vic”, “act”)

a. Apply the factor function and factor level. Describe the results.

```
state <- c("tas", "sa", "qld", "nsw", "nsw", "nt", "wa", "wa", "qld",
"vic", "nsw", "vic", "qld", "qld", "sa", "tas", "sa", "nt",
"wa", "vic", "qld", "nsw", "nsw", "wa", "sa", "act", "nsw",
"vic", "vic", "act")

factor_state <- factor(state, levels = c("act", "nsw", "nt", "qld", "sa", "tas", "vic", "wa"))

factor_state
```

```
## [1] tas sa qld nsw nsw nt wa wa qld vic nsw vic qld qld sa tas sa nt wa
## [20] vic qld nsw nsw wa sa act nsw vic vic act
## Levels: act nsw nt qld sa tas vic wa
```

*# The result will be a factor that aligns with the unique values in the original character vector. Each*

5. From #4 - continuation:

- Suppose we have the incomes of the same tax accountants in another vector (in suitably large units of money)

```
incomes <- c(60, 49, 40, 61, 64, 60, 59, 54, 62, 69, 70, 42, 56, 61, 61, 61, 58, 51, 48, 65, 49, 49, 41, 48, 52, 46,
59, 46, 58, 43)
```

a. Calculate the sample mean income for each state we can now use the special function tapply():

Example: giving a means vector with the components labelled by the levels `incmeans <- tapply(incomes, statef, mean)`

Note: The function `tapply()` is used to apply a function, here `mean()`, to each group of components of the first argument, here `incomes`, defined by the levels of the second component, here `state 2`

```
incomes <- c(60, 49, 40, 61, 64, 60, 59, 54,
62, 69, 70, 42, 56, 61, 61, 61, 58, 51, 48,
65, 49, 49, 41, 48, 52, 46, 59, 46, 58, 43)

meanIncomes <- tapply(incomes, factor_state, mean)
meanIncomes

##      act      nsw      nt      qld      sa      tas      vic      wa
## 44.50000 57.33333 55.50000 53.60000 55.00000 60.50000 56.00000 52.25000
```

b.Copy the results and interpret.

Result:

```
act      nsw      nt      qld      sa      tas      vic      wa
44.50000 57.33333 55.50000 53.60000 55.00000 60.50000 56.00000 52.25000
```

This output contains the mean of income for each state. And each names are levels of the factor of `stateFactor`.

6.Calculate the standard errors of the state income means (refer again to number 3)

```
stdError <- function(x) sqrt(var(x)/length(x))
```

Note: After this assignment, the standard errors are calculated by: `incster <- tapply(incomes, statef, stdError)`

a. What is the standard error? Write the codes.

```
stdError <- function(x) sqrt(var(x)/length(x))
incster <- tapply(incomes, state, stdError)

standardError <- tapply(incomes, factor_state, stdError)
standardError

##      act      nsw      nt      qld      sa      tas      vic      wa
## 1.500000 4.310195 4.500000 4.106093 2.738613 0.500000 5.244044 2.657536
```

```
#b.
# in no.5 we see the means of every states while here, we calculate the standard error of each states.
# the standard errors provide a measure of the uncertainty associated with the sample mean incomes for
```

b. Interpret the results.

The vector `incster` contains the standard errors associated with the estimated mean income for each state.

7. Use the titanic dataset.

a. Subset the titanic dataset of those who survived and not survived. Show the codes and its result.

```
``r
#install.packages("titanic")
```

```

library(titanic)

data("titanic_train")

titanic_data <- titanic_train

str(titanic_data)

## 'data.frame': 891 obs. of 12 variables:
## $ PassengerId: int 1 2 3 4 5 6 7 8 9 10 ...
## $ Survived : int 0 1 1 1 0 0 0 0 1 1 ...
## $ Pclass : int 3 1 3 1 3 3 1 3 3 2 ...
## $ Name : chr "Braund, Mr. Owen Harris" "Cumings, Mrs. John Bradley (Florence Briggs Thayer)"
## $ Sex : chr "male" "female" "female" "female" ...
## $ Age : num 22 38 26 35 35 NA 54 2 27 14 ...
## $ SibSp : int 1 1 0 1 0 0 0 3 0 1 ...
## $ Parch : int 0 0 0 0 0 0 0 1 2 0 ...
## $ Ticket : chr "A/5 21171" "PC 17599" "STON/O2. 3101282" "113803" ...
## $ Fare : num 7.25 71.28 7.92 53.1 8.05 ...
## $ Cabin : chr "" "C85" "" "C123" ...
## $ Embarked : chr "S" "C" "S" "S" ...

survived <- subset(titanic_data, Survived == 1)
survived

## PassengerId Survived Pclass
## 2 2 1 1
## 3 3 1 3
## 4 4 1 1
## 9 9 1 3
## 10 10 1 2
## 11 11 1 3
## 12 12 1 1
## 16 16 1 2
## 18 18 1 2
## 20 20 1 3
## 22 22 1 2
## 23 23 1 3
## 24 24 1 1
## 26 26 1 3
## 29 29 1 3
## 32 32 1 1
## 33 33 1 3
## 37 37 1 3
## 40 40 1 3
## 44 44 1 2
## 45 45 1 3
## 48 48 1 3
## 53 53 1 1
## 54 54 1 2
## 56 56 1 1
## 57 57 1 2
## 59 59 1 2
## 62 62 1 1

```

## 66	66	1	3
## 67	67	1	2
## 69	69	1	3
## 75	75	1	3
## 79	79	1	2
## 80	80	1	3
## 82	82	1	3
## 83	83	1	3
## 85	85	1	2
## 86	86	1	3
## 89	89	1	1
## 98	98	1	1
## 99	99	1	2
## 107	107	1	3
## 108	108	1	3
## 110	110	1	3
## 124	124	1	2
## 126	126	1	3
## 128	128	1	3
## 129	129	1	3
## 134	134	1	2
## 137	137	1	1
## 142	142	1	3
## 143	143	1	3
## 147	147	1	3
## 152	152	1	1
## 157	157	1	3
## 162	162	1	2
## 166	166	1	3
## 167	167	1	1
## 173	173	1	3
## 184	184	1	2
## 185	185	1	3
## 187	187	1	3
## 188	188	1	1
## 191	191	1	2
## 193	193	1	3
## 194	194	1	2
## 195	195	1	1
## 196	196	1	1
## 199	199	1	3
## 205	205	1	3
## 208	208	1	3
## 209	209	1	3
## 210	210	1	1
## 212	212	1	2
## 216	216	1	1
## 217	217	1	3
## 219	219	1	1
## 221	221	1	3
## 225	225	1	1
## 227	227	1	2
## 231	231	1	1
## 234	234	1	3

## 238	238	1	2
## 242	242	1	3
## 248	248	1	2
## 249	249	1	1
## 256	256	1	3
## 257	257	1	1
## 258	258	1	1
## 259	259	1	1
## 260	260	1	2
## 262	262	1	3
## 268	268	1	3
## 269	269	1	1
## 270	270	1	1
## 272	272	1	3
## 273	273	1	2
## 275	275	1	3
## 276	276	1	1
## 280	280	1	3
## 284	284	1	3
## 287	287	1	3
## 289	289	1	2
## 290	290	1	3
## 291	291	1	1
## 292	292	1	1
## 299	299	1	1
## 300	300	1	1
## 301	301	1	3
## 302	302	1	3
## 304	304	1	2
## 306	306	1	1
## 307	307	1	1
## 308	308	1	1
## 310	310	1	1
## 311	311	1	1
## 312	312	1	1
## 316	316	1	3
## 317	317	1	2
## 319	319	1	1
## 320	320	1	1
## 323	323	1	2
## 324	324	1	2
## 326	326	1	1
## 328	328	1	2
## 329	329	1	3
## 330	330	1	1
## 331	331	1	3
## 335	335	1	1
## 338	338	1	1
## 339	339	1	3
## 341	341	1	2
## 342	342	1	1
## 346	346	1	2
## 347	347	1	2
## 348	348	1	3

## 349	349	1	3
## 357	357	1	1
## 359	359	1	3
## 360	360	1	3
## 367	367	1	1
## 368	368	1	3
## 369	369	1	3
## 370	370	1	1
## 371	371	1	1
## 376	376	1	1
## 377	377	1	3
## 381	381	1	1
## 382	382	1	3
## 384	384	1	1
## 388	388	1	2
## 390	390	1	2
## 391	391	1	1
## 392	392	1	3
## 394	394	1	1
## 395	395	1	3
## 400	400	1	2
## 401	401	1	3
## 408	408	1	2
## 413	413	1	1
## 415	415	1	3
## 417	417	1	2
## 418	418	1	2
## 427	427	1	2
## 428	428	1	2
## 430	430	1	3
## 431	431	1	1
## 432	432	1	3
## 433	433	1	2
## 436	436	1	1
## 438	438	1	2
## 441	441	1	2
## 444	444	1	2
## 445	445	1	3
## 446	446	1	1
## 447	447	1	2
## 448	448	1	1
## 449	449	1	3
## 450	450	1	1
## 454	454	1	1
## 456	456	1	3
## 458	458	1	1
## 459	459	1	2
## 461	461	1	1
## 470	470	1	3
## 473	473	1	2
## 474	474	1	2
## 480	480	1	3
## 484	484	1	3
## 485	485	1	1



## 487	487	1	1
## 490	490	1	3
## 497	497	1	1
## 505	505	1	1
## 507	507	1	2
## 508	508	1	1
## 510	510	1	3
## 511	511	1	3
## 513	513	1	1
## 514	514	1	1
## 517	517	1	2
## 519	519	1	2
## 521	521	1	1
## 524	524	1	1
## 527	527	1	2
## 531	531	1	2
## 534	534	1	3
## 536	536	1	2
## 538	538	1	1
## 540	540	1	1
## 541	541	1	1
## 544	544	1	2
## 547	547	1	2
## 548	548	1	2
## 550	550	1	2
## 551	551	1	1
## 554	554	1	3
## 555	555	1	3
## 557	557	1	1
## 559	559	1	1
## 560	560	1	3
## 570	570	1	3
## 571	571	1	2
## 572	572	1	1
## 573	573	1	1
## 574	574	1	3
## 577	577	1	2
## 578	578	1	1
## 580	580	1	3
## 581	581	1	2
## 582	582	1	1
## 586	586	1	1
## 588	588	1	1
## 592	592	1	1
## 597	597	1	2
## 600	600	1	1
## 601	601	1	2
## 605	605	1	1
## 608	608	1	1
## 609	609	1	2
## 610	610	1	1
## 613	613	1	3
## 616	616	1	2
## 619	619	1	2

## 622	622	1	1
## 623	623	1	3
## 628	628	1	1
## 631	631	1	1
## 633	633	1	1
## 636	636	1	2
## 642	642	1	1
## 644	644	1	3
## 645	645	1	3
## 646	646	1	1
## 648	648	1	1
## 650	650	1	3
## 652	652	1	2
## 654	654	1	3
## 661	661	1	1
## 665	665	1	3
## 670	670	1	1
## 671	671	1	2
## 674	674	1	2
## 678	678	1	3
## 680	680	1	1
## 682	682	1	1
## 690	690	1	1
## 691	691	1	1
## 692	692	1	3
## 693	693	1	3
## 698	698	1	3
## 701	701	1	1
## 702	702	1	1
## 707	707	1	2
## 708	708	1	1
## 709	709	1	1
## 710	710	1	3
## 711	711	1	1
## 713	713	1	1
## 717	717	1	1
## 718	718	1	2
## 721	721	1	2
## 725	725	1	1
## 727	727	1	2
## 728	728	1	3
## 731	731	1	1
## 738	738	1	1
## 741	741	1	1
## 743	743	1	1
## 745	745	1	3
## 748	748	1	2
## 751	751	1	2
## 752	752	1	3
## 755	755	1	2
## 756	756	1	2
## 760	760	1	1
## 763	763	1	3
## 764	764	1	1

## 766	766	1	1
## 775	775	1	2
## 778	778	1	3
## 780	780	1	1
## 781	781	1	3
## 782	782	1	1
## 787	787	1	3
## 789	789	1	3
## 797	797	1	1
## 798	798	1	3
## 802	802	1	2
## 803	803	1	1
## 804	804	1	3
## 805	805	1	3
## 810	810	1	1
## 821	821	1	1
## 822	822	1	3
## 824	824	1	3
## 828	828	1	2
## 829	829	1	3
## 830	830	1	1
## 831	831	1	3
## 832	832	1	2
## 836	836	1	1
## 839	839	1	3
## 840	840	1	1
## 843	843	1	1
## 850	850	1	1
## 854	854	1	1
## 856	856	1	3
## 857	857	1	1
## 858	858	1	1
## 859	859	1	3
## 863	863	1	1
## 866	866	1	2
## 867	867	1	2
## 870	870	1	3
## 872	872	1	1
## 875	875	1	2
## 876	876	1	3
## 880	880	1	1
## 881	881	1	2
## 888	888	1	1
## 890	890	1	1

##	Name
## 2	Cumings, Mrs. John Bradley (Florence Briggs Thayer)
## 3	Heikkinen, Miss. Laina
## 4	Futrelle, Mrs. Jacques Heath (Lily May Peel)
## 9	Johnson, Mrs. Oscar W (Elisabeth Vilhelmina Berg)
## 10	Nasser, Mrs. Nicholas (Adele Achem)
## 11	Sandstrom, Miss. Marguerite Rut
## 12	Bonnell, Miss. Elizabeth
## 16	Hewlett, Mrs. (Mary D Kingcome)
## 18	Williams, Mr. Charles Eugene

## 20	Masselmani, Mrs. Fatima
## 22	Beesley, Mr. Lawrence
## 23	McGowan, Miss. Anna "Annie"
## 24	Sloper, Mr. William Thompson
## 26	Asplund, Mrs. Carl Oscar (Selma Augusta Emilia Johansson)
## 29	O'Dwyer, Miss. Ellen "Nellie"
## 32	Spencer, Mrs. William Augustus (Marie Eugenie)
## 33	Glynn, Miss. Mary Agatha
## 37	Mamee, Mr. Hanna
## 40	Nicola-Yarred, Miss. Jamila
## 44	Laroche, Miss. Simonne Marie Anne Andree
## 45	Devaney, Miss. Margaret Delia
## 48	O'Driscoll, Miss. Bridget
## 53	Harper, Mrs. Henry Sleeper (Myna Haxtun)
## 54	Faunthorpe, Mrs. Lizzie (Elizabeth Anne Wilkinson)
## 56	Woolner, Mr. Hugh
## 57	Rugg, Miss. Emily
## 59	West, Miss. Constance Mirium
## 62	Icard, Miss. Amelie
## 66	Moubarek, Master. Gerios
## 67	Nye, Mrs. (Elizabeth Ramell)
## 69	Andersson, Miss. Erna Alexandra
## 75	Bing, Mr. Lee
## 79	Caldwell, Master. Alden Gates
## 80	Dowdell, Miss. Elizabeth
## 82	Sheerlinck, Mr. Jan Baptist
## 83	McDermott, Miss. Brigdet Delia
## 85	Ilett, Miss. Bertha
## 86	Backstrom, Mrs. Karl Alfred (Maria Mathilda Gustafsson)
## 89	Fortune, Miss. Mabel Helen
## 98	Greenfield, Mr. William Bertram
## 99	Doling, Mrs. John T (Ada Julia Bone)
## 107	Salkjelsvik, Miss. Anna Kristine
## 108	Moss, Mr. Albert Johan
## 110	Moran, Miss. Bertha
## 124	Webber, Miss. Susan
## 126	Nicola-Yarred, Master. Elias
## 128	Madsen, Mr. Fridtjof Arne
## 129	Peter, Miss. Anna
## 134	Weisz, Mrs. Leopold (Mathilde Francoise Pede)
## 137	Newsom, Miss. Helen Monypeny
## 142	Nysten, Miss. Anna Sofia
## 143	Hakkarainen, Mrs. Pekka Pietari (Elin Matilda Dolck)
## 147	Andersson, Mr. August Edvard ("Wennerstrom")
## 152	Pears, Mrs. Thomas (Edith Wearne)
## 157	Gilnagh, Miss. Katherine "Katie"
## 162	Watt, Mrs. James (Elizabeth "Bessie" Inglis Milne)
## 166	Goldsmith, Master. Frank John William "Frankie"
## 167	Chibnall, Mrs. (Edith Martha Bowerman)
## 173	Johnson, Miss. Eleanor Ileen
## 184	Becker, Master. Richard F
## 185	Kink-Heilmann, Miss. Luise Gretchen
## 187	O'Brien, Mrs. Thomas (Johanna "Hannah" Godfrey)
## 188	Romaine, Mr. Charles Hallace ("Mr C Rolmane")

## 191	Pinsky, Mrs. (Rosa)
## 193	Andersen-Jensen, Miss. Carla Christine Nielsine
## 194	Navratil, Master. Michel M
## 195	Brown, Mrs. James Joseph (Margaret Tobin)
## 196	Lurette, Miss. Elise
## 199	Madigan, Miss. Margaret "Maggie"
## 205	Cohen, Mr. Gurshon "Gus"
## 208	Albimona, Mr. Nassef Cassem
## 209	Carr, Miss. Helen "Ellen"
## 210	Blank, Mr. Henry
## 212	Cameron, Miss. Clear Annie
## 216	Newell, Miss. Madeleine
## 217	Honkanen, Miss. Eliina
## 219	Bazzani, Miss. Albina
## 221	Sunderland, Mr. Victor Francis
## 225	Hoyt, Mr. Frederick Maxfield
## 227	Mellors, Mr. William John
## 231	Harris, Mrs. Henry Birkhardt (Irene Wallach)
## 234	Asplund, Miss. Lillian Gertrud
## 238	Collyer, Miss. Marjorie "Lottie"
## 242	Murphy, Miss. Katherine "Kate"
## 248	Hamalainen, Mrs. William (Anna)
## 249	Beckwith, Mr. Richard Leonard
## 256	Touma, Mrs. Darwis (Hanne Youssef Razi)
## 257	Thorne, Mrs. Gertrude Maybelle
## 258	Cherry, Miss. Gladys
## 259	Ward, Miss. Anna
## 260	Parrish, Mrs. (Lutie Davis)
## 262	Asplund, Master. Edvin Rojj Felix
## 268	Persson, Mr. Ernst Ulrik
## 269	Graham, Mrs. William Thompson (Edith Junkins)
## 270	Bissette, Miss. Amelia
## 272	Tornquist, Mr. William Henry
## 273	Mellinger, Mrs. (Elizabeth Anne Maidment)
## 275	Healy, Miss. Hanora "Nora"
## 276	Andrews, Miss. Kornelia Theodosia
## 280	Abbott, Mrs. Stanton (Rosa Hunt)
## 284	Dorking, Mr. Edward Arthur
## 287	de Mulder, Mr. Theodore
## 289	Hosono, Mr. Masabumi
## 290	Connolly, Miss. Kate
## 291	Barber, Miss. Ellen "Nellie"
## 292	Bishop, Mrs. Dickinson H (Helen Walton)
## 299	Saalfeld, Mr. Adolphe
## 300	Baxter, Mrs. James (Helene DeLaudeniere Chaput)
## 301	Kelly, Miss. Anna Katherine "Annie Kate"
## 302	McCoy, Mr. Bernard
## 304	Keane, Miss. Nora A
## 306	Allison, Master. Hudson Trevor
## 307	Fleming, Miss. Margaret
## 308	Penasco y Castellana, Mrs. Victor de Satode (Maria Josefa Perez de Soto y Vallejo)
## 310	Francatelli, Miss. Laura Mabel
## 311	Hays, Miss. Margaret Bechstein
## 312	Ryerson, Miss. Emily Borie

## 316 Nilsson, Miss. Helmina Josefina  
 ## 317 Kantor, Mrs. Sinai (Miriam Sternin)  
 ## 319 Wick, Miss. Mary Natalie  
 ## 320 Spedden, Mrs. Frederic Oakley (Margaretta Corning Stone)  
 ## 323 Slayter, Miss. Hilda Mary  
 ## 324 Caldwell, Mrs. Albert Francis (Sylvia Mae Harbaugh)  
 ## 326 Young, Miss. Marie Grice  
 ## 328 Ball, Mrs. (Ada E Hall)  
 ## 329 Goldsmith, Mrs. Frank John (Emily Alice Brown)  
 ## 330 Hippach, Miss. Jean Gertrude  
 ## 331 McCoy, Miss. Agnes  
 ## 335 Frauenthal, Mrs. Henry William (Clara Heinsheimer)  
 ## 338 Burns, Miss. Elizabeth Margaret  
 ## 339 Dahl, Mr. Karl Edwart  
 ## 341 Navratil, Master. Edmond Roger  
 ## 342 Fortune, Miss. Alice Elizabeth  
 ## 346 Brown, Miss. Amelia "Mildred"  
 ## 347 Smith, Miss. Marion Elsie  
 ## 348 Davison, Mrs. Thomas Henry (Mary E Finck)  
 ## 349 Coutts, Master. William Loch "William"  
 ## 357 Bowerman, Miss. Elsie Edith  
 ## 359 McGovern, Miss. Mary  
 ## 360 Mockler, Miss. Helen Mary "Ellie"  
 ## 367 Warren, Mrs. Frank Manley (Anna Sophia Atkinson)  
 ## 368 Moussa, Mrs. (Mantoura Boulos)  
 ## 369 Jermyn, Miss. Annie  
 ## 370 Aubart, Mme. Leontine Pauline  
 ## 371 Harder, Mr. George Achilles  
 ## 376 Meyer, Mrs. Edgar Joseph (Leila Saks)  
 ## 377 Landergren, Miss. Aurora Adelia  
 ## 381 Bidois, Miss. Rosalie  
 ## 382 Nakid, Miss. Maria ("Mary")  
 ## 384 Holverson, Mrs. Alexander Oskar (Mary Aline Towner)  
 ## 388 Buss, Miss. Kate  
 ## 390 Lehmann, Miss. Bertha  
 ## 391 Carter, Mr. William Ernest  
 ## 392 Jansson, Mr. Carl Olof  
 ## 394 Newell, Miss. Marjorie  
 ## 395 Sandstrom, Mrs. Hjalmar (Agnes Charlotta Bengtsson)  
 ## 400 Trout, Mrs. William H (Jessie L)  
 ## 401 Niskanen, Mr. Juha  
 ## 408 Richards, Master. William Rowe  
 ## 413 Minahan, Miss. Daisy E  
 ## 415 Sundman, Mr. Johan Julian  
 ## 417 Drew, Mrs. James Vivian (Lulu Thorne Christian)  
 ## 418 Silven, Miss. Lylyli Karoliina  
 ## 427 Clarke, Mrs. Charles V (Ada Maria Winfield)  
 ## 428 Phillips, Miss. Kate Florence ("Mrs Kate Louise Phillips Marshall")  
 ## 430 Pickard, Mr. Berk (Berk Trembisky)  
 ## 431 Bjornstrom-Steffansson, Mr. Mauritz Hakan  
 ## 432 Thorneycroft, Mrs. Percival (Florence Kate White)  
 ## 433 Louch, Mrs. Charles Alexander (Alice Adelaide Slow)  
 ## 436 Carter, Miss. Lucile Polk  
 ## 438 Richards, Mrs. Sidney (Emily Hocking)

## 441 Hart, Mrs. Benjamin (Esther Ada Bloomfield)  
 ## 444 Reynaldo, Ms. Encarnacion  
 ## 445 Johannesen-Bratthammer, Mr. Bernt  
 ## 446 Dodge, Master. Washington  
 ## 447 Mellinger, Miss. Madeleine Violet  
 ## 448 Seward, Mr. Frederic Kimber  
 ## 449 Baclini, Miss. Marie Catherine  
 ## 450 Peuchen, Major. Arthur Godfrey  
 ## 454 Goldenberg, Mr. Samuel L  
 ## 456 Jalsevac, Mr. Ivan  
 ## 458 Kenyon, Mrs. Frederick R (Marion)  
 ## 459 Toomey, Miss. Ellen  
 ## 461 Anderson, Mr. Harry  
 ## 470 Baclini, Miss. Helene Barbara  
 ## 473 West, Mrs. Edwy Arthur (Ada Mary Worth)  
 ## 474 Jerwan, Mrs. Amin S (Marie Marthe Thuillard)  
 ## 480 Hirvonen, Miss. Hildur E  
 ## 484 Turkula, Mrs. (Hedwig)  
 ## 485 Bishop, Mr. Dickinson H  
 ## 487 Hoyt, Mrs. Frederick Maxfield (Jane Anne Forby)  
 ## 490 Coutts, Master. Eden Leslie "Neville"  
 ## 497 Eustis, Miss. Elizabeth Mussey  
 ## 505 Maioni, Miss. Roberta  
 ## 507 Quick, Mrs. Frederick Charles (Jane Richards)  
 ## 508 Bradley, Mr. George ("George Arthur Brayton")  
 ## 510 Lang, Mr. Fang  
 ## 511 Daly, Mr. Eugene Patrick  
 ## 513 McGough, Mr. James Robert  
 ## 514 Rothschild, Mrs. Martin (Elizabeth L. Barrett)  
 ## 517 Lemoire, Mrs. (Amelia Milley)  
 ## 519 Angle, Mrs. William A (Florence "Mary" Agnes Hughes)  
 ## 521 Perreault, Miss. Anne  
 ## 524 Hippach, Mrs. Louis Albert (Ida Sophia Fischer)  
 ## 527 Ridsdale, Miss. Lucy  
 ## 531 Quick, Miss. Phyllis May  
 ## 534 Peter, Mrs. Catherine (Catherine Rizk)  
 ## 536 Hart, Miss. Eva Miriam  
 ## 538 LeRoy, Miss. Bertha  
 ## 540 Frolicher, Miss. Hedwig Margaritha  
 ## 541 Crosby, Miss. Harriet R  
 ## 544 Beane, Mr. Edward  
 ## 547 Beane, Mrs. Edward (Ethel Clarke)  
 ## 548 Padro y Manent, Mr. Julian  
 ## 550 Davies, Master. John Morgan Jr  
 ## 551 Thayer, Mr. John Borland Jr  
 ## 554 Leeni, Mr. Fahim ("Philip Zenni")  
 ## 555 Ohman, Miss. Velin  
 ## 557 Duff Gordon, Lady. (Lucille Christiana Sutherland) ("Mrs Morgan")  
 ## 559 Taussig, Mrs. Emil (Tillie Mandelbaum)  
 ## 560 de Messemaeker, Mrs. Guillaume Joseph (Emma)  
 ## 570 Jonsson, Mr. Carl  
 ## 571 Harris, Mr. George  
 ## 572 Appleton, Mrs. Edward Dale (Charlotte Lamson)  
 ## 573 Flynn, Mr. John Irwin ("Irving")

## 574 Kelly, Miss. Mary  
 ## 577 Garside, Miss. Ethel  
 ## 578 Silvey, Mrs. William Baird (Alice Munger)  
 ## 580 Jussila, Mr. Eiriik  
 ## 581 Christy, Miss. Julie Rachel  
 ## 582 Thayer, Mrs. John Borland (Marian Longstreth Morris)  
 ## 586 Taussig, Miss. Ruth  
 ## 588 Frolicher-Stehli, Mr. Maxmillian  
 ## 592 Stephenson, Mrs. Walter Bertram (Martha Eustis)  
 ## 597 Leitch, Miss. Jessie Wills  
 ## 600 Duff Gordon, Sir. Cosmo Edmund ("Mr Morgan")  
 ## 601 Jacobsohn, Mrs. Sidney Samuel (Amy Frances Christy)  
 ## 605 Homer, Mr. Harry ("Mr E Haven")  
 ## 608 Daniel, Mr. Robert Williams  
 ## 609 Laroche, Mrs. Joseph (Juliette Marie Louise Lafargue)  
 ## 610 Shutes, Miss. Elizabeth W  
 ## 613 Murphy, Miss. Margaret Jane  
 ## 616 Herman, Miss. Alice  
 ## 619 Becker, Miss. Marion Louise  
 ## 622 Kimball, Mr. Edwin Nelson Jr  
 ## 623 Nakid, Mr. Sahid  
 ## 628 Longley, Miss. Gretchen Fiske  
 ## 631 Barkworth, Mr. Algernon Henry Wilson  
 ## 633 Stahelin-Maeglin, Dr. Max  
 ## 636 Davis, Miss. Mary  
 ## 642 Sagesser, Mlle. Emma  
 ## 644 Foo, Mr. Choong  
 ## 645 Baclini, Miss. Eugenie  
 ## 646 Harper, Mr. Henry Sleeper  
 ## 648 Simonius-Blumer, Col. Oberst Alfons  
 ## 650 Stanley, Miss. Amy Zillah Elsie  
 ## 652 Doling, Miss. Elsie  
 ## 654 O'Leary, Miss. Hanora "Norah"  
 ## 661 Frauenthal, Dr. Henry William  
 ## 665 Lindqvist, Mr. Eino William  
 ## 670 Taylor, Mrs. Elmer Zebley (Juliet Cummins Wright)  
 ## 671 Brown, Mrs. Thomas William Solomon (Elizabeth Catherine Ford)  
 ## 674 Wilhelms, Mr. Charles  
 ## 678 Turja, Miss. Anna Sofia  
 ## 680 Cardeza, Mr. Thomas Drake Martinez  
 ## 682 Hassab, Mr. Hammad  
 ## 690 Madill, Miss. Georgette Alexandra  
 ## 691 Dick, Mr. Albert Adrian  
 ## 692 Karun, Miss. Manca  
 ## 693 Lam, Mr. Ali  
 ## 698 Mullens, Miss. Katherine "Katie"  
 ## 701 Astor, Mrs. John Jacob (Madeleine Talmadge Force)  
 ## 702 Silverthorne, Mr. Spencer Victor  
 ## 707 Kelly, Mrs. Florence "Fannie"  
 ## 708 Calderhead, Mr. Edward Pennington  
 ## 709 Cleaver, Miss. Alice  
 ## 710 Moubarek, Master. Halim Gonios ("William George")  
 ## 711 Mayne, Mlle. Berthe Antonine ("Mrs de Villiers")  
 ## 713 Taylor, Mr. Elmer Zebley



## 717 Endres, Miss. Caroline Louise  
 ## 718 Troutt, Miss. Edwina Celia "Winnie"  
 ## 721 Harper, Miss. Annie Jessie "Nina"  
 ## 725 Chambers, Mr. Norman Campbell  
 ## 727 Renouf, Mrs. Peter Henry (Lillian Jefferys)  
 ## 728 Mannion, Miss. Margareth  
 ## 731 Allen, Miss. Elisabeth Walton  
 ## 738 Lesurer, Mr. Gustave J  
 ## 741 Hawksford, Mr. Walter James  
 ## 743 Ryerson, Miss. Susan Parker "Suzette"  
 ## 745 Strandén, Mr. Juho  
 ## 748 Sinkkonen, Miss. Anna  
 ## 751 Wells, Miss. Joan  
 ## 752 Moor, Master. Meier  
 ## 755 Herman, Mrs. Samuel (Jane Laver)  
 ## 756 Hamalainen, Master. Viljo  
 ## 760 Rothés, the Countess. of (Lucy Noel Martha Dyer-Edwards)  
 ## 763 Barah, Mr. Hanna Assi  
 ## 764 Carter, Mrs. William Ernest (Lucile Polk)  
 ## 766 Hogeboom, Mrs. John C (Anna Andrews)  
 ## 775 Hocking, Mrs. Elizabeth (Eliza Needs)  
 ## 778 Emanuel, Miss. Virginia Ethel  
 ## 780 Robert, Mrs. Edward Scott (Elisabeth Walton McMillan)  
 ## 781 Ayoub, Miss. Banoura  
 ## 782 Dick, Mrs. Albert Adrian (Vera Gillespie)  
 ## 787 Sjoblom, Miss. Anna Sofia  
 ## 789 Dean, Master. Bertram Vere  
 ## 797 Leader, Dr. Alice (Farnham)  
 ## 798 Osman, Mrs. Mara  
 ## 802 Collyer, Mrs. Harvey (Charlotte Annie Tate)  
 ## 803 Carter, Master. William Thornton II  
 ## 804 Thomas, Master. Assad Alexander  
 ## 805 Hedman, Mr. Oskar Arvid  
 ## 810 Chambers, Mrs. Norman Campbell (Bertha Griggs)  
 ## 821 Hays, Mrs. Charles Melville (Clara Jennings Gregg)  
 ## 822 Lulic, Mr. Nikola  
 ## 824 Moor, Mrs. (Beila)  
 ## 828 Mallet, Master. Andre  
 ## 829 McCormack, Mr. Thomas Joseph  
 ## 830 Stone, Mrs. George Nelson (Martha Evelyn)  
 ## 831 Yasbeck, Mrs. Antoni (Selini Alexander)  
 ## 832 Richards, Master. George Sibley  
 ## 836 Compton, Miss. Sara Rebecca  
 ## 839 Chip, Mr. Chang  
 ## 840 Marechal, Mr. Pierre  
 ## 843 Serepeca, Miss. Augusta  
 ## 850 Goldenberg, Mrs. Samuel L (Edwiga Grabowska)  
 ## 854 Lines, Miss. Mary Conover  
 ## 856 Aks, Mrs. Sam (Leah Rosen)  
 ## 857 Wick, Mrs. George Dennick (Mary Hitchcock)  
 ## 858 Daly, Mr. Peter Denis  
 ## 859 Baclini, Mrs. Solomon (Latifa Qurban)  
 ## 863 Swift, Mrs. Frederick Joel (Margaret Welles Barron)  
 ## 866 Bystrom, Mrs. (Karolina)

## 867							Duran y More, Miss. Asuncion	
## 870							Johnson, Master. Harold Theodor	
## 872							Beckwith, Mrs. Richard Leonard (Sallie Monypeny)	
## 875							Abelson, Mrs. Samuel (Hannah Wizosky)	
## 876							Najib, Miss. Adele Kiamie "Jane"	
## 880							Potter, Mrs. Thomas Jr (Lily Alexenia Wilson)	
## 881							Shelley, Mrs. William (Imanita Parrish Hall)	
## 888							Graham, Miss. Margaret Edith	
## 890							Behr, Mr. Karl Howell	
##	Sex	Age	SibSp	Parch		Ticket	Fare	Cabin
## 2	female	38.00	1	0		PC 17599	71.2833	C85
## 3	female	26.00	0	0	STON/O2.	3101282	7.9250	
## 4	female	35.00	1	0		113803	53.1000	C123
## 9	female	27.00	0	2		347742	11.1333	
## 10	female	14.00	1	0		237736	30.0708	
## 11	female	4.00	1	1		PP 9549	16.7000	G6
## 12	female	58.00	0	0		113783	26.5500	C103
## 16	female	55.00	0	0		248706	16.0000	
## 18	male	NA	0	0		244373	13.0000	
## 20	female	NA	0	0		2649	7.2250	
## 22	male	34.00	0	0		248698	13.0000	D56
## 23	female	15.00	0	0		330923	8.0292	
## 24	male	28.00	0	0		113788	35.5000	A6
## 26	female	38.00	1	5		347077	31.3875	
## 29	female	NA	0	0		330959	7.8792	
## 32	female	NA	1	0		PC 17569	146.5208	B78
## 33	female	NA	0	0		335677	7.7500	
## 37	male	NA	0	0		2677	7.2292	
## 40	female	14.00	1	0		2651	11.2417	
## 44	female	3.00	1	2	SC/Paris	2123	41.5792	
## 45	female	19.00	0	0		330958	7.8792	
## 48	female	NA	0	0		14311	7.7500	
## 53	female	49.00	1	0		PC 17572	76.7292	D33
## 54	female	29.00	1	0		2926	26.0000	
## 56	male	NA	0	0		19947	35.5000	C52
## 57	female	21.00	0	0		C.A. 31026	10.5000	
## 59	female	5.00	1	2		C.A. 34651	27.7500	
## 62	female	38.00	0	0		113572	80.0000	B28
## 66	male	NA	1	1		2661	15.2458	
## 67	female	29.00	0	0		C.A. 29395	10.5000	F33
## 69	female	17.00	4	2		3101281	7.9250	
## 75	male	32.00	0	0		1601	56.4958	
## 79	male	0.83	0	2		248738	29.0000	
## 80	female	30.00	0	0		364516	12.4750	
## 82	male	29.00	0	0		345779	9.5000	
## 83	female	NA	0	0		330932	7.7875	
## 85	female	17.00	0	0		S0/C 14885	10.5000	
## 86	female	33.00	3	0		3101278	15.8500	
## 89	female	23.00	3	2		19950	263.0000	C23 C25 C27
## 98	male	23.00	0	1		PC 17759	63.3583	D10 D12
## 99	female	34.00	0	1		231919	23.0000	
## 107	female	21.00	0	0		343120	7.6500	
## 108	male	NA	0	0		312991	7.7750	
## 110	female	NA	1	0		371110	24.1500	

## 124 female	32.50	0	0	27267	13.0000	E101
## 126 male	12.00	1	0	2651	11.2417	
## 128 male	24.00	0	0	C 17369	7.1417	
## 129 female	NA	1	1	2668	22.3583	F E69
## 134 female	29.00	1	0	228414	26.0000	
## 137 female	19.00	0	2	11752	26.2833	D47
## 142 female	22.00	0	0	347081	7.7500	
## 143 female	24.00	1	0	STON/O2. 3101279	15.8500	
## 147 male	27.00	0	0	350043	7.7958	
## 152 female	22.00	1	0	113776	66.6000	C2
## 157 female	16.00	0	0	35851	7.7333	
## 162 female	40.00	0	0	C.A. 33595	15.7500	
## 166 male	9.00	0	2	363291	20.5250	
## 167 female	NA	0	1	113505	55.0000	E33
## 173 female	1.00	1	1	347742	11.1333	
## 184 male	1.00	2	1	230136	39.0000	F4
## 185 female	4.00	0	2	315153	22.0250	
## 187 female	NA	1	0	370365	15.5000	
## 188 male	45.00	0	0	111428	26.5500	
## 191 female	32.00	0	0	234604	13.0000	
## 193 female	19.00	1	0	350046	7.8542	
## 194 male	3.00	1	1	230080	26.0000	F2
## 195 female	44.00	0	0	PC 17610	27.7208	B4
## 196 female	58.00	0	0	PC 17569	146.5208	B80
## 199 female	NA	0	0	370370	7.7500	
## 205 male	18.00	0	0	A/5 3540	8.0500	
## 208 male	26.00	0	0	2699	18.7875	
## 209 female	16.00	0	0	367231	7.7500	
## 210 male	40.00	0	0	112277	31.0000	A31
## 212 female	35.00	0	0	F.C.C. 13528	21.0000	
## 216 female	31.00	1	0	35273	113.2750	D36
## 217 female	27.00	0	0	STON/O2. 3101283	7.9250	
## 219 female	32.00	0	0	11813	76.2917	D15
## 221 male	16.00	0	0	SOTON/OQ 392089	8.0500	
## 225 male	38.00	1	0	19943	90.0000	C93
## 227 male	19.00	0	0	SW/PP 751	10.5000	
## 231 female	35.00	1	0	36973	83.4750	C83
## 234 female	5.00	4	2	347077	31.3875	
## 238 female	8.00	0	2	C.A. 31921	26.2500	
## 242 female	NA	1	0	367230	15.5000	
## 248 female	24.00	0	2	250649	14.5000	
## 249 male	37.00	1	1	11751	52.5542	D35
## 256 female	29.00	0	2	2650	15.2458	
## 257 female	NA	0	0	PC 17585	79.2000	
## 258 female	30.00	0	0	110152	86.5000	B77
## 259 female	35.00	0	0	PC 17755	512.3292	
## 260 female	50.00	0	1	230433	26.0000	
## 262 male	3.00	4	2	347077	31.3875	
## 268 male	25.00	1	0	347083	7.7750	
## 269 female	58.00	0	1	PC 17582	153.4625	C125
## 270 female	35.00	0	0	PC 17760	135.6333	C99
## 272 male	25.00	0	0	LINE	0.0000	
## 273 female	41.00	0	1	250644	19.5000	
## 275 female	NA	0	0	370375	7.7500	

## 276 female	63.00	1	0	13502	77.9583	D7
## 280 female	35.00	1	1	C.A. 2673	20.2500	
## 284 male	19.00	0	0	A/5. 10482	8.0500	
## 287 male	30.00	0	0	345774	9.5000	
## 289 male	42.00	0	0	237798	13.0000	
## 290 female	22.00	0	0	370373	7.7500	
## 291 female	26.00	0	0	19877	78.8500	
## 292 female	19.00	1	0	11967	91.0792	B49
## 299 male	NA	0	0	19988	30.5000	C106
## 300 female	50.00	0	1	PC 17558	247.5208	B58 B60
## 301 female	NA	0	0	9234	7.7500	
## 302 male	NA	2	0	367226	23.2500	
## 304 female	NA	0	0	226593	12.3500	E101
## 306 male	0.92	1	2	113781	151.5500	C22 C26
## 307 female	NA	0	0	17421	110.8833	
## 308 female	17.00	1	0	PC 17758	108.9000	C65
## 310 female	30.00	0	0	PC 17485	56.9292	E36
## 311 female	24.00	0	0	11767	83.1583	C54
## 312 female	18.00	2	2	PC 17608	262.3750	B57 B59 B63 B66
## 316 female	26.00	0	0	347470	7.8542	
## 317 female	24.00	1	0	244367	26.0000	
## 319 female	31.00	0	2	36928	164.8667	C7
## 320 female	40.00	1	1	16966	134.5000	E34
## 323 female	30.00	0	0	234818	12.3500	
## 324 female	22.00	1	1	248738	29.0000	
## 326 female	36.00	0	0	PC 17760	135.6333	C32
## 328 female	36.00	0	0	28551	13.0000	D
## 329 female	31.00	1	1	363291	20.5250	
## 330 female	16.00	0	1	111361	57.9792	B18
## 331 female	NA	2	0	367226	23.2500	
## 335 female	NA	1	0	PC 17611	133.6500	
## 338 female	41.00	0	0	16966	134.5000	E40
## 339 male	45.00	0	0	7598	8.0500	
## 341 male	2.00	1	1	230080	26.0000	F2
## 342 female	24.00	3	2	19950	263.0000	C23 C25 C27
## 346 female	24.00	0	0	248733	13.0000	F33
## 347 female	40.00	0	0	31418	13.0000	
## 348 female	NA	1	0	386525	16.1000	
## 349 male	3.00	1	1	C.A. 37671	15.9000	
## 357 female	22.00	0	1	113505	55.0000	E33
## 359 female	NA	0	0	330931	7.8792	
## 360 female	NA	0	0	330980	7.8792	
## 367 female	60.00	1	0	110813	75.2500	D37
## 368 female	NA	0	0	2626	7.2292	
## 369 female	NA	0	0	14313	7.7500	
## 370 female	24.00	0	0	PC 17477	69.3000	B35
## 371 male	25.00	1	0	11765	55.4417	E50
## 376 female	NA	1	0	PC 17604	82.1708	
## 377 female	22.00	0	0	C 7077	7.2500	
## 381 female	42.00	0	0	PC 17757	227.5250	
## 382 female	1.00	0	2	2653	15.7417	
## 384 female	35.00	1	0	113789	52.0000	
## 388 female	36.00	0	0	27849	13.0000	
## 390 female	17.00	0	0	SC 1748	12.0000	

## 391	male	36.00	1	2	113760	120.0000	B96 B98
## 392	male	21.00	0	0	350034	7.7958	
## 394	female	23.00	1	0	35273	113.2750	D36
## 395	female	24.00	0	2	PP 9549	16.7000	G6
## 400	female	28.00	0	0	240929	12.6500	
## 401	male	39.00	0	0	STON/O 2. 3101289	7.9250	
## 408	male	3.00	1	1	29106	18.7500	
## 413	female	33.00	1	0	19928	90.0000	C78
## 415	male	44.00	0	0	STON/O 2. 3101269	7.9250	
## 417	female	34.00	1	1	28220	32.5000	
## 418	female	18.00	0	2	250652	13.0000	
## 427	female	28.00	1	0	2003	26.0000	
## 428	female	19.00	0	0	250655	26.0000	
## 430	male	32.00	0	0	SOTON/O.Q. 392078	8.0500	E10
## 431	male	28.00	0	0	110564	26.5500	C52
## 432	female	NA	1	0	376564	16.1000	
## 433	female	42.00	1	0	SC/AH 3085	26.0000	
## 436	female	14.00	1	2	113760	120.0000	B96 B98
## 438	female	24.00	2	3	29106	18.7500	
## 441	female	45.00	1	1	F.C.C. 13529	26.2500	
## 444	female	28.00	0	0	230434	13.0000	
## 445	male	NA	0	0	65306	8.1125	
## 446	male	4.00	0	2	33638	81.8583	A34
## 447	female	13.00	0	1	250644	19.5000	
## 448	male	34.00	0	0	113794	26.5500	
## 449	female	5.00	2	1	2666	19.2583	
## 450	male	52.00	0	0	113786	30.5000	C104
## 454	male	49.00	1	0	17453	89.1042	C92
## 456	male	29.00	0	0	349240	7.8958	
## 458	female	NA	1	0	17464	51.8625	D21
## 459	female	50.00	0	0	F.C.C. 13531	10.5000	
## 461	male	48.00	0	0	19952	26.5500	E12
## 470	female	0.75	2	1	2666	19.2583	
## 473	female	33.00	1	2	C.A. 34651	27.7500	
## 474	female	23.00	0	0	SC/AH Basle 541	13.7917	D
## 480	female	2.00	0	1	3101298	12.2875	
## 484	female	63.00	0	0	4134	9.5875	
## 485	male	25.00	1	0	11967	91.0792	B49
## 487	female	35.00	1	0	19943	90.0000	C93
## 490	male	9.00	1	1	C.A. 37671	15.9000	
## 497	female	54.00	1	0	36947	78.2667	D20
## 505	female	16.00	0	0	110152	86.5000	B79
## 507	female	33.00	0	2	26360	26.0000	
## 508	male	NA	0	0	111427	26.5500	
## 510	male	26.00	0	0	1601	56.4958	
## 511	male	29.00	0	0	382651	7.7500	
## 513	male	36.00	0	0	PC 17473	26.2875	E25
## 514	female	54.00	1	0	PC 17603	59.4000	
## 517	female	34.00	0	0	C.A. 34260	10.5000	F33
## 519	female	36.00	1	0	226875	26.0000	
## 521	female	30.00	0	0	12749	93.5000	B73
## 524	female	44.00	0	1	111361	57.9792	B18
## 527	female	50.00	0	0	W./C. 14258	10.5000	
## 531	female	2.00	1	1	26360	26.0000	

## 534 female	NA	0	2		2668	22.3583	
## 536 female	7.00	0	2	F.C.C.	13529	26.2500	
## 538 female	30.00	0	0	PC	17761	106.4250	
## 540 female	22.00	0	2		13568	49.5000	B39
## 541 female	36.00	0	2	WE/P	5735	71.0000	B22
## 544 male	32.00	1	0		2908	26.0000	
## 547 female	19.00	1	0		2908	26.0000	
## 548 male	NA	0	0	SC/PARIS	2146	13.8625	
## 550 male	8.00	1	1	C.A.	33112	36.7500	
## 551 male	17.00	0	2		17421	110.8833	C70
## 554 male	22.00	0	0		2620	7.2250	
## 555 female	22.00	0	0		347085	7.7750	
## 557 female	48.00	1	0		11755	39.6000	A16
## 559 female	39.00	1	1		110413	79.6500	E67
## 560 female	36.00	1	0		345572	17.4000	
## 570 male	32.00	0	0		350417	7.8542	
## 571 male	62.00	0	0	S.W./PP	752	10.5000	
## 572 female	53.00	2	0		11769	51.4792	C101
## 573 male	36.00	0	0	PC	17474	26.3875	E25
## 574 female	NA	0	0		14312	7.7500	
## 577 female	34.00	0	0		243880	13.0000	
## 578 female	39.00	1	0		13507	55.9000	E44
## 580 male	32.00	0	0	STON/O 2.	3101286	7.9250	
## 581 female	25.00	1	1		237789	30.0000	
## 582 female	39.00	1	1		17421	110.8833	C68
## 586 female	18.00	0	2		110413	79.6500	E68
## 588 male	60.00	1	1		13567	79.2000	B41
## 592 female	52.00	1	0		36947	78.2667	D20
## 597 female	NA	0	0		248727	33.0000	
## 600 male	49.00	1	0	PC	17485	56.9292	A20
## 601 female	24.00	2	1		243847	27.0000	
## 605 male	35.00	0	0		111426	26.5500	
## 608 male	27.00	0	0		113804	30.5000	
## 609 female	22.00	1	2	SC/Paris	2123	41.5792	
## 610 female	40.00	0	0	PC	17582	153.4625	C125
## 613 female	NA	1	0		367230	15.5000	
## 616 female	24.00	1	2		220845	65.0000	
## 619 female	4.00	2	1		230136	39.0000	F4
## 622 male	42.00	1	0		11753	52.5542	D19
## 623 male	20.00	1	1		2653	15.7417	
## 628 female	21.00	0	0		13502	77.9583	D9
## 631 male	80.00	0	0		27042	30.0000	A23
## 633 male	32.00	0	0		13214	30.5000	B50
## 636 female	28.00	0	0		237668	13.0000	
## 642 female	24.00	0	0	PC	17477	69.3000	B35
## 644 male	NA	0	0		1601	56.4958	
## 645 female	0.75	2	1		2666	19.2583	
## 646 male	48.00	1	0	PC	17572	76.7292	D33
## 648 male	56.00	0	0		13213	35.5000	A26
## 650 female	23.00	0	0	CA.	2314	7.5500	
## 652 female	18.00	0	1		231919	23.0000	
## 654 female	NA	0	0		330919	7.8292	
## 661 male	50.00	2	0	PC	17611	133.6500	
## 665 male	20.00	1	0	STON/O 2.	3101285	7.9250	

## 670 female	NA	1	0	19996	52.0000	C126
## 671 female	40.00	1	1	29750	39.0000	
## 674 male	31.00	0	0	244270	13.0000	
## 678 female	18.00	0	0	4138	9.8417	
## 680 male	36.00	0	1	PC 17755	512.3292	B51 B53 B55
## 682 male	27.00	0	0	PC 17572	76.7292	D49
## 690 female	15.00	0	1	24160	211.3375	B5
## 691 male	31.00	1	0	17474	57.0000	B20
## 692 female	4.00	0	1	349256	13.4167	
## 693 male	NA	0	0	1601	56.4958	
## 698 female	NA	0	0	35852	7.7333	
## 701 female	18.00	1	0	PC 17757	227.5250	C62 C64
## 702 male	35.00	0	0	PC 17475	26.2875	E24
## 707 female	45.00	0	0	223596	13.5000	
## 708 male	42.00	0	0	PC 17476	26.2875	E24
## 709 female	22.00	0	0	113781	151.5500	
## 710 male	NA	1	1	2661	15.2458	
## 711 female	24.00	0	0	PC 17482	49.5042	C90
## 713 male	48.00	1	0	19996	52.0000	C126
## 717 female	38.00	0	0	PC 17757	227.5250	C45
## 718 female	27.00	0	0	34218	10.5000	E101
## 721 female	6.00	0	1	248727	33.0000	
## 725 male	27.00	1	0	113806	53.1000	E8
## 727 female	30.00	3	0	31027	21.0000	
## 728 female	NA	0	0	36866	7.7375	
## 731 female	29.00	0	0	24160	211.3375	B5
## 738 male	35.00	0	0	PC 17755	512.3292	B101
## 741 male	NA	0	0	16988	30.0000	D45
## 743 female	21.00	2	2	PC 17608	262.3750	B57 B59 B63 B66
## 745 male	31.00	0	0	STON/O 2. 3101288	7.9250	
## 748 female	30.00	0	0	250648	13.0000	
## 751 female	4.00	1	1	29103	23.0000	
## 752 male	6.00	0	1	392096	12.4750	E121
## 755 female	48.00	1	2	220845	65.0000	
## 756 male	0.67	1	1	250649	14.5000	
## 760 female	33.00	0	0	110152	86.5000	B77
## 763 male	20.00	0	0	2663	7.2292	
## 764 female	36.00	1	2	113760	120.0000	B96 B98
## 766 female	51.00	1	0	13502	77.9583	D11
## 775 female	54.00	1	3	29105	23.0000	
## 778 female	5.00	0	0	364516	12.4750	
## 780 female	43.00	0	1	24160	211.3375	B3
## 781 female	13.00	0	0	2687	7.2292	
## 782 female	17.00	1	0	17474	57.0000	B20
## 787 female	18.00	0	0	3101265	7.4958	
## 789 male	1.00	1	2	C.A. 2315	20.5750	
## 797 female	49.00	0	0	17465	25.9292	D17
## 798 female	31.00	0	0	349244	8.6833	
## 802 female	31.00	1	1	C.A. 31921	26.2500	
## 803 male	11.00	1	2	113760	120.0000	B96 B98
## 804 male	0.42	0	1	2625	8.5167	
## 805 male	27.00	0	0	347089	6.9750	
## 810 female	33.00	1	0	113806	53.1000	E8
## 821 female	52.00	1	1	12749	93.5000	B69

##	822	male	27.00	0	0		315098	8.6625	
##	824	female	27.00	0	1		392096	12.4750	E121
##	828	male	1.00	0	2	S.C./PARIS	2079	37.0042	
##	829	male	NA	0	0		367228	7.7500	
##	830	female	62.00	0	0		113572	80.0000	B28
##	831	female	15.00	1	0		2659	14.4542	
##	832	male	0.83	1	1		29106	18.7500	
##	836	female	39.00	1	1	PC	17756	83.1583	E49
##	839	male	32.00	0	0		1601	56.4958	
##	840	male	NA	0	0		11774	29.7000	C47
##	843	female	30.00	0	0		113798	31.0000	
##	850	female	NA	1	0		17453	89.1042	C92
##	854	female	16.00	0	1	PC	17592	39.4000	D28
##	856	female	18.00	0	1		392091	9.3500	
##	857	female	45.00	1	1		36928	164.8667	
##	858	male	51.00	0	0		113055	26.5500	E17
##	859	female	24.00	0	3		2666	19.2583	
##	863	female	48.00	0	0		17466	25.9292	D17
##	866	female	42.00	0	0		236852	13.0000	
##	867	female	27.00	1	0	SC/PARIS	2149	13.8583	
##	870	male	4.00	1	1		347742	11.1333	
##	872	female	47.00	1	1		11751	52.5542	D35
##	875	female	28.00	1	0	P/PP	3381	24.0000	
##	876	female	15.00	0	0		2667	7.2250	
##	880	female	56.00	0	1		11767	83.1583	C50
##	881	female	25.00	0	1		230433	26.0000	
##	888	female	19.00	0	0		112053	30.0000	B42
##	890	male	26.00	0	0		111369	30.0000	C148
##		Embarked							
##	2	C							
##	3	S							
##	4	S							
##	9	S							
##	10	C							
##	11	S							
##	12	S							
##	16	S							
##	18	S							
##	20	C							
##	22	S							
##	23	Q							
##	24	S							
##	26	S							
##	29	Q							
##	32	C							
##	33	Q							
##	37	C							
##	40	C							
##	44	C							
##	45	Q							
##	48	Q							
##	53	C							
##	54	S							
##	56	S							



## 57	S
## 59	S
## 62	
## 66	C
## 67	S
## 69	S
## 75	S
## 79	S
## 80	S
## 82	S
## 83	Q
## 85	S
## 86	S
## 89	S
## 98	C
## 99	S
## 107	S
## 108	S
## 110	Q
## 124	S
## 126	C
## 128	S
## 129	C
## 134	S
## 137	S
## 142	S
## 143	S
## 147	S
## 152	S
## 157	Q
## 162	S
## 166	S
## 167	S
## 173	S
## 184	S
## 185	S
## 187	Q
## 188	S
## 191	S
## 193	S
## 194	S
## 195	C
## 196	C
## 199	Q
## 205	S
## 208	C
## 209	Q
## 210	C
## 212	S
## 216	C
## 217	S
## 219	C
## 221	S
## 225	S

## 227	S
## 231	S
## 234	S
## 238	S
## 242	Q
## 248	S
## 249	S
## 256	C
## 257	C
## 258	S
## 259	C
## 260	S
## 262	S
## 268	S
## 269	S
## 270	S
## 272	S
## 273	S
## 275	Q
## 276	S
## 280	S
## 284	S
## 287	S
## 289	S
## 290	Q
## 291	S
## 292	C
## 299	S
## 300	C
## 301	Q
## 302	Q
## 304	Q
## 306	S
## 307	C
## 308	C
## 310	C
## 311	C
## 312	C
## 316	S
## 317	S
## 319	S
## 320	C
## 323	Q
## 324	S
## 326	C
## 328	S
## 329	S
## 330	C
## 331	Q
## 335	S
## 338	C
## 339	S
## 341	S
## 342	S

## 346	S
## 347	S
## 348	S
## 349	S
## 357	S
## 359	Q
## 360	Q
## 367	C
## 368	C
## 369	Q
## 370	C
## 371	C
## 376	C
## 377	S
## 381	C
## 382	C
## 384	S
## 388	S
## 390	C
## 391	S
## 392	S
## 394	C
## 395	S
## 400	S
## 401	S
## 408	S
## 413	Q
## 415	S
## 417	S
## 418	S
## 427	S
## 428	S
## 430	S
## 431	S
## 432	S
## 433	S
## 436	S
## 438	S
## 441	S
## 444	S
## 445	S
## 446	S
## 447	S
## 448	S
## 449	C
## 450	S
## 454	C
## 456	C
## 458	S
## 459	S
## 461	S
## 470	C
## 473	S
## 474	C

## 480	S
## 484	S
## 485	C
## 487	S
## 490	S
## 497	C
## 505	S
## 507	S
## 508	S
## 510	S
## 511	Q
## 513	S
## 514	C
## 517	S
## 519	S
## 521	S
## 524	C
## 527	S
## 531	S
## 534	C
## 536	S
## 538	C
## 540	C
## 541	S
## 544	S
## 547	S
## 548	C
## 550	S
## 551	C
## 554	C
## 555	S
## 557	C
## 559	S
## 560	S
## 570	S
## 571	S
## 572	S
## 573	S
## 574	Q
## 577	S
## 578	S
## 580	S
## 581	S
## 582	C
## 586	S
## 588	C
## 592	C
## 597	S
## 600	C
## 601	S
## 605	C
## 608	S
## 609	C
## 610	S

## 613	Q
## 616	S
## 619	S
## 622	S
## 623	C
## 628	S
## 631	S
## 633	C
## 636	S
## 642	C
## 644	S
## 645	C
## 646	C
## 648	C
## 650	S
## 652	S
## 654	Q
## 661	S
## 665	S
## 670	S
## 671	S
## 674	S
## 678	S
## 680	C
## 682	C
## 690	S
## 691	S
## 692	C
## 693	S
## 698	Q
## 701	C
## 702	S
## 707	S
## 708	S
## 709	S
## 710	C
## 711	C
## 713	S
## 717	C
## 718	S
## 721	S
## 725	S
## 727	S
## 728	Q
## 731	S
## 738	C
## 741	S
## 743	C
## 745	S
## 748	S
## 751	S
## 752	S
## 755	S
## 756	S

```

## 760      S
## 763      C
## 764      S
## 766      S
## 775      S
## 778      S
## 780      S
## 781      C
## 782      S
## 787      S
## 789      S
## 797      S
## 798      S
## 802      S
## 803      S
## 804      C
## 805      S
## 810      S
## 821      S
## 822      S
## 824      S
## 828      C
## 829      Q
## 830
## 831      C
## 832      S
## 836      C
## 839      S
## 840      C
## 843      C
## 850      C
## 854      S
## 856      S
## 857      S
## 858      S
## 859      C
## 863      S
## 866      S
## 867      C
## 870      S
## 872      S
## 875      C
## 876      C
## 880      C
## 881      S
## 888      S
## 890      C

```

```

dead <- subset(titanic_data, Survived == 0)
dead

```

```

##      PassengerId Survived Pclass
## 1              1         0       3
## 5              5         0       3
## 6              6         0       3

```

## 7	7	0	1
## 8	8	0	3
## 13	13	0	3
## 14	14	0	3
## 15	15	0	3
## 17	17	0	3
## 19	19	0	3
## 21	21	0	2
## 25	25	0	3
## 27	27	0	3
## 28	28	0	1
## 30	30	0	3
## 31	31	0	1
## 34	34	0	2
## 35	35	0	1
## 36	36	0	1
## 38	38	0	3
## 39	39	0	3
## 41	41	0	3
## 42	42	0	2
## 43	43	0	3
## 46	46	0	3
## 47	47	0	3
## 49	49	0	3
## 50	50	0	3
## 51	51	0	3
## 52	52	0	3
## 55	55	0	1
## 58	58	0	3
## 60	60	0	3
## 61	61	0	3
## 63	63	0	1
## 64	64	0	3
## 65	65	0	1
## 68	68	0	3
## 70	70	0	3
## 71	71	0	2
## 72	72	0	3
## 73	73	0	2
## 74	74	0	3
## 76	76	0	3
## 77	77	0	3
## 78	78	0	3
## 81	81	0	3
## 84	84	0	1
## 87	87	0	3
## 88	88	0	3
## 90	90	0	3
## 91	91	0	3
## 92	92	0	3
## 93	93	0	1
## 94	94	0	3
## 95	95	0	3
## 96	96	0	3

## 97	97	0	1
## 100	100	0	2
## 101	101	0	3
## 102	102	0	3
## 103	103	0	1
## 104	104	0	3
## 105	105	0	3
## 106	106	0	3
## 109	109	0	3
## 111	111	0	1
## 112	112	0	3
## 113	113	0	3
## 114	114	0	3
## 115	115	0	3
## 116	116	0	3
## 117	117	0	3
## 118	118	0	2
## 119	119	0	1
## 120	120	0	3
## 121	121	0	2
## 122	122	0	3
## 123	123	0	2
## 125	125	0	1
## 127	127	0	3
## 130	130	0	3
## 131	131	0	3
## 132	132	0	3
## 133	133	0	3
## 135	135	0	2
## 136	136	0	2
## 138	138	0	1
## 139	139	0	3
## 140	140	0	1
## 141	141	0	3
## 144	144	0	3
## 145	145	0	2
## 146	146	0	2
## 148	148	0	3
## 149	149	0	2
## 150	150	0	2
## 151	151	0	2
## 153	153	0	3
## 154	154	0	3
## 155	155	0	3
## 156	156	0	1
## 158	158	0	3
## 159	159	0	3
## 160	160	0	3
## 161	161	0	3
## 163	163	0	3
## 164	164	0	3
## 165	165	0	3
## 168	168	0	3
## 169	169	0	1



## 170	170	0	3
## 171	171	0	1
## 172	172	0	3
## 174	174	0	3
## 175	175	0	1
## 176	176	0	3
## 177	177	0	3
## 178	178	0	1
## 179	179	0	2
## 180	180	0	3
## 181	181	0	3
## 182	182	0	2
## 183	183	0	3
## 186	186	0	1
## 189	189	0	3
## 190	190	0	3
## 192	192	0	2
## 197	197	0	3
## 198	198	0	3
## 200	200	0	2
## 201	201	0	3
## 202	202	0	3
## 203	203	0	3
## 204	204	0	3
## 206	206	0	3
## 207	207	0	3
## 211	211	0	3
## 213	213	0	3
## 214	214	0	2
## 215	215	0	3
## 218	218	0	2
## 220	220	0	2
## 222	222	0	2
## 223	223	0	3
## 224	224	0	3
## 226	226	0	3
## 228	228	0	3
## 229	229	0	2
## 230	230	0	3
## 232	232	0	3
## 233	233	0	2
## 235	235	0	2
## 236	236	0	3
## 237	237	0	2
## 239	239	0	2
## 240	240	0	2
## 241	241	0	3
## 243	243	0	2
## 244	244	0	3
## 245	245	0	3
## 246	246	0	1
## 247	247	0	3
## 250	250	0	2
## 251	251	0	3

## 252	252	0	3
## 253	253	0	1
## 254	254	0	3
## 255	255	0	3
## 261	261	0	3
## 263	263	0	1
## 264	264	0	1
## 265	265	0	3
## 266	266	0	2
## 267	267	0	3
## 271	271	0	1
## 274	274	0	1
## 277	277	0	3
## 278	278	0	2
## 279	279	0	3
## 281	281	0	3
## 282	282	0	3
## 283	283	0	3
## 285	285	0	1
## 286	286	0	3
## 288	288	0	3
## 293	293	0	2
## 294	294	0	3
## 295	295	0	3
## 296	296	0	1
## 297	297	0	3
## 298	298	0	1
## 303	303	0	3
## 305	305	0	3
## 309	309	0	2
## 313	313	0	2
## 314	314	0	3
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## 887	887	0	2				
## 889	889	0	3				
## 891	891	0	3				
##				Name	Sex	Age	SibSp
## 1				Braund, Mr. Owen Harris	male	22.0	1
## 5				Allen, Mr. William Henry	male	35.0	0
## 6				Moran, Mr. James	male	NA	0
## 7				McCarthy, Mr. Timothy J	male	54.0	0
## 8				Palsson, Master. Gosta Leonard	male	2.0	3
## 13				Saundercock, Mr. William Henry	male	20.0	0
## 14				Andersson, Mr. Anders Johan	male	39.0	1
## 15				Vestrom, Miss. Hulda Amanda Adolfina	female	14.0	0
## 17				Rice, Master. Eugene	male	2.0	4
## 19	Vander Planke, Mrs. Julius (Emelia Maria Vandemoortele)				female	31.0	1
## 21				Fynney, Mr. Joseph J	male	35.0	0
## 25				Palsson, Miss. Torborg Danira	female	8.0	3
## 27				Emir, Mr. Farred Chehab	male	NA	0
## 28				Fortune, Mr. Charles Alexander	male	19.0	3
## 30				Todoroff, Mr. Lalio	male	NA	0
## 31				Uruchurtu, Don. Manuel E	male	40.0	0
## 34				Wheadon, Mr. Edward H	male	66.0	0
## 35				Meyer, Mr. Edgar Joseph	male	28.0	1
## 36				Holverson, Mr. Alexander Oskar	male	42.0	1
## 38				Cann, Mr. Ernest Charles	male	21.0	0
## 39				Vander Planke, Miss. Augusta Maria	female	18.0	2
## 41	Ahlin, Mrs. Johan (Johanna Persdotter Larsson)				female	40.0	1
## 42	Turpin, Mrs. William John Robert (Dorothy Ann Wonnacott)				female	27.0	1
## 43				Kraeff, Mr. Theodor	male	NA	0
## 46				Rogers, Mr. William John	male	NA	0
## 47				Lennon, Mr. Denis	male	NA	1
## 49				Samaan, Mr. Youssef	male	NA	2
## 50	Arnold-Franchi, Mrs. Josef (Josefine Franchi)				female	18.0	1
## 51				Panula, Master. Juha Niilo	male	7.0	4
## 52				Nosworthy, Mr. Richard Cater	male	21.0	0
## 55				Ostby, Mr. Engelhart Cornelius	male	65.0	0
## 58				Novel, Mr. Mansouer	male	28.5	0
## 60				Goodwin, Master. William Frederick	male	11.0	5
## 61				Sirayanian, Mr. Orsen	male	22.0	0
## 63				Harris, Mr. Henry Birkhardt	male	45.0	1
## 64				Skoog, Master. Harald	male	4.0	3
## 65				Stewart, Mr. Albert A	male	NA	0
## 68				Crease, Mr. Ernest James	male	19.0	0
## 70				Kink, Mr. Vincenz	male	26.0	2
## 71				Jenkin, Mr. Stephen Curnow	male	32.0	0
## 72				Goodwin, Miss. Lillian Amy	female	16.0	5
## 73				Hood, Mr. Ambrose Jr	male	21.0	0
## 74				Chronopoulos, Mr. Apostolos	male	26.0	1
## 76				Moen, Mr. Sigurd Hansen	male	25.0	0
## 77				Staneff, Mr. Ivan	male	NA	0
## 78				Moutal, Mr. Rahamin Haim	male	NA	0
## 81				Waelens, Mr. Achille	male	22.0	0

## 84	Carrau, Mr. Francisco M	male	28.0	0
## 87	Ford, Mr. William Neal	male	16.0	1
## 88	Slocovski, Mr. Selman Francis	male	NA	0
## 90	Celotti, Mr. Francesco	male	24.0	0
## 91	Christmann, Mr. Emil	male	29.0	0
## 92	Andreasson, Mr. Paul Edvin	male	20.0	0
## 93	Chaffee, Mr. Herbert Fuller	male	46.0	1
## 94	Dean, Mr. Bertram Frank	male	26.0	1
## 95	Coxon, Mr. Daniel	male	59.0	0
## 96	Shorney, Mr. Charles Joseph	male	NA	0
## 97	Goldschmidt, Mr. George B	male	71.0	0
## 100	Kantor, Mr. Sinai	male	34.0	1
## 101	Petranec, Miss. Matilda	female	28.0	0
## 102	Petroff, Mr. Pastcho ("Pentcho")	male	NA	0
## 103	White, Mr. Richard Frasar	male	21.0	0
## 104	Johansson, Mr. Gustaf Joel	male	33.0	0
## 105	Gustafsson, Mr. Anders Vilhelm	male	37.0	2
## 106	Mionoff, Mr. Stoytcho	male	28.0	0
## 109	Rekic, Mr. Tido	male	38.0	0
## 111	Porter, Mr. Walter Chamberlain	male	47.0	0
## 112	Zabour, Miss. Hileni	female	14.5	1
## 113	Barton, Mr. David John	male	22.0	0
## 114	Jussila, Miss. Katriina	female	20.0	1
## 115	Attalah, Miss. Malake	female	17.0	0
## 116	Pekoniemi, Mr. Edvard	male	21.0	0
## 117	Connors, Mr. Patrick	male	70.5	0
## 118	Turpin, Mr. William John Robert	male	29.0	1
## 119	Baxter, Mr. Quigg Edmond	male	24.0	0
## 120	Andersson, Miss. Ellis Anna Maria	female	2.0	4
## 121	Hickman, Mr. Stanley George	male	21.0	2
## 122	Moore, Mr. Leonard Charles	male	NA	0
## 123	Nasser, Mr. Nicholas	male	32.5	1
## 125	White, Mr. Percival Wayland	male	54.0	0
## 127	McMahon, Mr. Martin	male	NA	0
## 130	Ekstrom, Mr. Johan	male	45.0	0
## 131	Drazenoic, Mr. Jozef	male	33.0	0
## 132	Coelho, Mr. Domingos Fernando	male	20.0	0
## 133	Robins, Mrs. Alexander A (Grace Charity Laury)	female	47.0	1
## 135	Sobey, Mr. Samuel James Hayden	male	25.0	0
## 136	Richard, Mr. Emile	male	23.0	0
## 138	Futrelle, Mr. Jacques Heath	male	37.0	1
## 139	Osen, Mr. Olaf Elon	male	16.0	0
## 140	Giglio, Mr. Victor	male	24.0	0
## 141	Boulos, Mrs. Joseph (Sultana)	female	NA	0
## 144	Burke, Mr. Jeremiah	male	19.0	0
## 145	Andrew, Mr. Edgardo Samuel	male	18.0	0
## 146	Nicholls, Mr. Joseph Charles	male	19.0	1
## 148	Ford, Miss. Robina Maggie "Ruby"	female	9.0	2
## 149	Navratil, Mr. Michel ("Louis M Hoffman")	male	36.5	0
## 150	Byles, Rev. Thomas Roussel Davids	male	42.0	0
## 151	Bateman, Rev. Robert James	male	51.0	0
## 153	Meo, Mr. Alfonzo	male	55.5	0
## 154	van Billiard, Mr. Austin Blyler	male	40.5	0
## 155	Olsen, Mr. Ole Martin	male	NA	0

## 156	Williams, Mr. Charles Duane	male	51.0	0
## 158	Corn, Mr. Harry	male	30.0	0
## 159	Smiljanic, Mr. Mile	male	NA	0
## 160	Sage, Master. Thomas Henry	male	NA	8
## 161	Cribb, Mr. John Hatfield	male	44.0	0
## 163	Bengtsson, Mr. John Viktor	male	26.0	0
## 164	Calic, Mr. Jovo	male	17.0	0
## 165	Panula, Master. Eino Viljami	male	1.0	4
## 168	Skoog, Mrs. William (Anna Bernhardina Karlsson)	female	45.0	1
## 169	Baumann, Mr. John D	male	NA	0
## 170	Ling, Mr. Lee	male	28.0	0
## 171	Van der hoef, Mr. Wyckoff	male	61.0	0
## 172	Rice, Master. Arthur	male	4.0	4
## 174	Sivola, Mr. Antti Wilhelm	male	21.0	0
## 175	Smith, Mr. James Clinch	male	56.0	0
## 176	Klasen, Mr. Klas Albin	male	18.0	1
## 177	Lefebvre, Master. Henry Forbes	male	NA	3
## 178	Isham, Miss. Ann Elizabeth	female	50.0	0
## 179	Hale, Mr. Reginald	male	30.0	0
## 180	Leonard, Mr. Lionel	male	36.0	0
## 181	Sage, Miss. Constance Gladys	female	NA	8
## 182	Pernot, Mr. Rene	male	NA	0
## 183	Asplund, Master. Clarence Gustaf Hugo	male	9.0	4
## 186	Rood, Mr. Hugh Roscoe	male	NA	0
## 189	Bourke, Mr. John	male	40.0	1
## 190	Turcin, Mr. Stjepan	male	36.0	0
## 192	Carbines, Mr. William	male	19.0	0
## 197	Mernagh, Mr. Robert	male	NA	0
## 198	Olsen, Mr. Karl Siegwart Andreas	male	42.0	0
## 200	Yrois, Miss. Henriette ("Mrs Harbeck")	female	24.0	0
## 201	Vande Walle, Mr. Nestor Cyriel	male	28.0	0
## 202	Sage, Mr. Frederick	male	NA	8
## 203	Johanson, Mr. Jakob Alfred	male	34.0	0
## 204	Youseff, Mr. Gerious	male	45.5	0
## 206	Strom, Miss. Telma Matilda	female	2.0	0
## 207	Backstrom, Mr. Karl Alfred	male	32.0	1
## 211	Ali, Mr. Ahmed	male	24.0	0
## 213	Perkin, Mr. John Henry	male	22.0	0
## 214	Givard, Mr. Hans Kristensen	male	30.0	0
## 215	Kiernan, Mr. Philip	male	NA	1
## 218	Jacobsohn, Mr. Sidney Samuel	male	42.0	1
## 220	Harris, Mr. Walter	male	30.0	0
## 222	Bracken, Mr. James H	male	27.0	0
## 223	Green, Mr. George Henry	male	51.0	0
## 224	Nenkoff, Mr. Christo	male	NA	0
## 226	Berglund, Mr. Karl Ivar Sven	male	22.0	0
## 228	Lovell, Mr. John Hall ("Henry")	male	20.5	0
## 229	Fahlstrom, Mr. Arne Jonas	male	18.0	0
## 230	Lefebvre, Miss. Mathilde	female	NA	3
## 232	Larsson, Mr. Bengt Edvin	male	29.0	0
## 233	Sjostedt, Mr. Ernst Adolf	male	59.0	0
## 235	Leyson, Mr. Robert William Norman	male	24.0	0
## 236	Harknett, Miss. Alice Phoebe	female	NA	0
## 237	Hold, Mr. Stephen	male	44.0	1

## 239	Pengelly, Mr. Frederick William	male	19.0	0
## 240	Hunt, Mr. George Henry	male	33.0	0
## 241	Zabour, Miss. Thamine	female	NA	1
## 243	Coleridge, Mr. Reginald Charles	male	29.0	0
## 244	Maenpaa, Mr. Matti Alexanteri	male	22.0	0
## 245	Attalah, Mr. Sleiman	male	30.0	0
## 246	Minahan, Dr. William Edward	male	44.0	2
## 247	Lindahl, Miss. Agda Thorilda Viktoria	female	25.0	0
## 250	Carter, Rev. Ernest Courtenay	male	54.0	1
## 251	Reed, Mr. James George	male	NA	0
## 252	Strom, Mrs. Wilhelm (Elna Matilda Persson)	female	29.0	1
## 253	Stead, Mr. William Thomas	male	62.0	0
## 254	Lobb, Mr. William Arthur	male	30.0	1
## 255	Rosblom, Mrs. Viktor (Helena Wilhelmina)	female	41.0	0
## 261	Smith, Mr. Thomas	male	NA	0
## 263	Taussig, Mr. Emil	male	52.0	1
## 264	Harrison, Mr. William	male	40.0	0
## 265	Henry, Miss. Delia	female	NA	0
## 266	Reeves, Mr. David	male	36.0	0
## 267	Panula, Mr. Ernesti Arvid	male	16.0	4
## 271	Cairns, Mr. Alexander	male	NA	0
## 274	Natsch, Mr. Charles H	male	37.0	0
## 277	Lindblom, Miss. Augusta Charlotta	female	45.0	0
## 278	Parkes, Mr. Francis "Frank"	male	NA	0
## 279	Rice, Master. Eric	male	7.0	4
## 281	Duane, Mr. Frank	male	65.0	0
## 282	Olsson, Mr. Nils Johan Goransson	male	28.0	0
## 283	de Pelsmaeker, Mr. Alfons	male	16.0	0
## 285	Smith, Mr. Richard William	male	NA	0
## 286	Stankovic, Mr. Ivan	male	33.0	0
## 288	Naidenoff, Mr. Penko	male	22.0	0
## 293	Levy, Mr. Rene Jacques	male	36.0	0
## 294	Haas, Miss. Aloisia	female	24.0	0
## 295	Mineff, Mr. Ivan	male	24.0	0
## 296	Lewy, Mr. Ervin G	male	NA	0
## 297	Hanna, Mr. Mansour	male	23.5	0
## 298	Allison, Miss. Helen Loraine	female	2.0	1
## 303	Johnson, Mr. William Cahoon Jr	male	19.0	0
## 305	Williams, Mr. Howard Hugh "Harry"	male	NA	0
## 309	Abelson, Mr. Samuel	male	30.0	1
## 313	Lahtinen, Mrs. William (Anna Sylfven)	female	26.0	1
## 314	Hendekovic, Mr. Ignjac	male	28.0	0
## 315	Hart, Mr. Benjamin	male	43.0	1
## 318	Moraweck, Dr. Ernest	male	54.0	0
## 321	Dennis, Mr. Samuel	male	22.0	0
## 322	Danoff, Mr. Yoto	male	27.0	0
## 325	Sage, Mr. George John Jr	male	NA	8
## 327	Nysveen, Mr. Johan Hansen	male	61.0	0
## 332	Partner, Mr. Austen	male	45.5	0
## 333	Graham, Mr. George Edward	male	38.0	0
## 334	Vander Planke, Mr. Leo Edmondus	male	16.0	2
## 336	Denkoff, Mr. Mitto	male	NA	0
## 337	Pears, Mr. Thomas Clinton	male	29.0	1
## 340	Blackwell, Mr. Stephen Weart	male	45.0	0

## 343	Collander, Mr. Erik Gustaf	male	28.0	0
## 344	Sedgwick, Mr. Charles Frederick Waddington	male	25.0	0
## 345	Fox, Mr. Stanley Hubert	male	36.0	0
## 350	Dimic, Mr. Jovan	male	42.0	0
## 351	Odahl, Mr. Nils Martin	male	23.0	0
## 352	Williams-Lambert, Mr. Fletcher Fellows	male	NA	0
## 353	Elias, Mr. Tannous	male	15.0	1
## 354	Arnold-Franchi, Mr. Josef	male	25.0	1
## 355	Yousif, Mr. Wazli	male	NA	0
## 356	Vanden Steen, Mr. Leo Peter	male	28.0	0
## 358	Funk, Miss. Annie Clemmer	female	38.0	0
## 361	Skoog, Mr. Wilhelm	male	40.0	1
## 362	del Carlo, Mr. Sebastiano	male	29.0	1
## 363	Barbara, Mrs. (Catherine David)	female	45.0	0
## 364	Asim, Mr. Adola	male	35.0	0
## 365	O'Brien, Mr. Thomas	male	NA	1
## 366	Adahl, Mr. Mauritz Nils Martin	male	30.0	0
## 372	Wiklund, Mr. Jakob Alfred	male	18.0	1
## 373	Beavan, Mr. William Thomas	male	19.0	0
## 374	Ringhini, Mr. Sante	male	22.0	0
## 375	Palsson, Miss. Stina Viola	female	3.0	3
## 378	Widener, Mr. Harry Elkins	male	27.0	0
## 379	Betros, Mr. Tannous	male	20.0	0
## 380	Gustafsson, Mr. Karl Gideon	male	19.0	0
## 383	Tikkanen, Mr. Juho	male	32.0	0
## 385	Plotcharsky, Mr. Vasil	male	NA	0
## 386	Davies, Mr. Charles Henry	male	18.0	0
## 387	Goodwin, Master. Sidney Leonard	male	1.0	5
## 389	Sadlier, Mr. Matthew	male	NA	0
## 393	Gustafsson, Mr. Johan Birger	male	28.0	2
## 396	Johansson, Mr. Erik	male	22.0	0
## 397	Olsson, Miss. Elina	female	31.0	0
## 398	McKane, Mr. Peter David	male	46.0	0
## 399	Pain, Dr. Alfred	male	23.0	0
## 402	Adams, Mr. John	male	26.0	0
## 403	Jussila, Miss. Mari Aina	female	21.0	1
## 404	Hakkarainen, Mr. Pekka Pietari	male	28.0	1
## 405	Oreskovic, Miss. Marija	female	20.0	0
## 406	Gale, Mr. Shadrach	male	34.0	1
## 407	Widegren, Mr. Carl/Charles Peter	male	51.0	0
## 409	Birkeland, Mr. Hans Martin Monsen	male	21.0	0
## 410	Lefebvre, Miss. Ida	female	NA	3
## 411	Sdycoff, Mr. Todor	male	NA	0
## 412	Hart, Mr. Henry	male	NA	0
## 414	Cunningham, Mr. Alfred Fleming	male	NA	0
## 416	Meek, Mrs. Thomas (Annie Louise Rowley)	female	NA	0
## 419	Matthews, Mr. William John	male	30.0	0
## 420	Van Impe, Miss. Catharina	female	10.0	0
## 421	Gheorgheff, Mr. Stanio	male	NA	0
## 422	Charters, Mr. David	male	21.0	0
## 423	Zimmerman, Mr. Leo	male	29.0	0
## 424	Danbom, Mrs. Ernst Gilbert (Anna Sigrid Maria Brogren)	female	28.0	1
## 425	Rosblom, Mr. Viktor Richard	male	18.0	1
## 426	Wiseman, Mr. Phillippe	male	NA	0

## 429	Flynn, Mr. James	male	NA	0
## 434	Kallio, Mr. Nikolai Erland	male	17.0	0
## 435	Silvey, Mr. William Baird	male	50.0	1
## 437	Ford, Miss. Doolina Margaret "Daisy"	female	21.0	2
## 439	Fortune, Mr. Mark	male	64.0	1
## 440	Kvillner, Mr. Johan Henrik Johannesson	male	31.0	0
## 442	Hampe, Mr. Leon	male	20.0	0
## 443	Petterson, Mr. Johan Emil	male	25.0	1
## 451	West, Mr. Edwy Arthur	male	36.0	1
## 452	Hagland, Mr. Ingvald Olai Olsen	male	NA	1
## 453	Foreman, Mr. Benjamin Laventall	male	30.0	0
## 455	Peduzzi, Mr. Joseph	male	NA	0
## 457	Millet, Mr. Francis Davis	male	65.0	0
## 460	O'Connor, Mr. Maurice	male	NA	0
## 462	Morley, Mr. William	male	34.0	0
## 463	Gee, Mr. Arthur H	male	47.0	0
## 464	Milling, Mr. Jacob Christian	male	48.0	0
## 465	Maisner, Mr. Simon	male	NA	0
## 466	Goncalves, Mr. Manuel Estanslas	male	38.0	0
## 467	Campbell, Mr. William	male	NA	0
## 468	Smart, Mr. John Montgomery	male	56.0	0
## 469	Scanlan, Mr. James	male	NA	0
## 471	Keefe, Mr. Arthur	male	NA	0
## 472	Cacic, Mr. Luka	male	38.0	0
## 475	Strandberg, Miss. Ida Sofia	female	22.0	0
## 476	Clifford, Mr. George Quincy	male	NA	0
## 477	Renouf, Mr. Peter Henry	male	34.0	1
## 478	Braund, Mr. Lewis Richard	male	29.0	1
## 479	Karlsson, Mr. Nils August	male	22.0	0
## 481	Goodwin, Master. Harold Victor	male	9.0	5
## 482	Frost, Mr. Anthony Wood "Archie"	male	NA	0
## 483	Rouse, Mr. Richard Henry	male	50.0	0
## 486	Lefebre, Miss. Jeannie	female	NA	3
## 488	Kent, Mr. Edward Austin	male	58.0	0
## 489	Somerton, Mr. Francis William	male	30.0	0
## 491	Hagland, Mr. Konrad Mathias Reiersen	male	NA	1
## 492	Windelov, Mr. Einar	male	21.0	0
## 493	Molson, Mr. Harry Markland	male	55.0	0
## 494	Artagaveytia, Mr. Ramon	male	71.0	0
## 495	Stanley, Mr. Edward Roland	male	21.0	0
## 496	Yousseff, Mr. Gerious	male	NA	0
## 498	Shellard, Mr. Frederick William	male	NA	0
## 499	Allison, Mrs. Hudson J C (Bessie Waldo Daniels)	female	25.0	1
## 500	Svensson, Mr. Olof	male	24.0	0
## 501	Calic, Mr. Petar	male	17.0	0
## 502	Canavan, Miss. Mary	female	21.0	0
## 503	O'Sullivan, Miss. Bridget Mary	female	NA	0
## 504	Laitinen, Miss. Kristina Sofia	female	37.0	0
## 506	Penasco y Castellana, Mr. Victor de Satode	male	18.0	1
## 509	Olsen, Mr. Henry Margido	male	28.0	0
## 512	Webber, Mr. James	male	NA	0
## 515	Coleff, Mr. Satio	male	24.0	0
## 516	Walker, Mr. William Anderson	male	47.0	0
## 518	Ryan, Mr. Patrick	male	NA	0

## 520	Pavlovic, Mr. Stefo	male	32.0	0
## 522	Vovk, Mr. Janko	male	22.0	0
## 523	Lahoud, Mr. Sarkis	male	NA	0
## 525	Kassem, Mr. Fared	male	NA	0
## 526	Farrell, Mr. James	male	40.5	0
## 528	Farthing, Mr. John	male	NA	0
## 529	Salonen, Mr. Johan Werner	male	39.0	0
## 530	Hocking, Mr. Richard George	male	23.0	2
## 532	Toufik, Mr. Nakli	male	NA	0
## 533	Elias, Mr. Joseph Jr	male	17.0	1
## 535	Cacic, Miss. Marija	female	30.0	0
## 537	Butt, Major. Archibald Willingham	male	45.0	0
## 539	Risien, Mr. Samuel Beard	male	NA	0
## 542	Andersson, Miss. Ingeborg Constanzia	female	9.0	4
## 543	Andersson, Miss. Sigrid Elisabeth	female	11.0	4
## 545	Douglas, Mr. Walter Donald	male	50.0	1
## 546	Nicholson, Mr. Arthur Ernest	male	64.0	0
## 549	Goldsmith, Mr. Frank John	male	33.0	1
## 552	Sharp, Mr. Percival James R	male	27.0	0
## 553	O'Brien, Mr. Timothy	male	NA	0
## 556	Wright, Mr. George	male	62.0	0
## 558	Robbins, Mr. Victor	male	NA	0
## 561	Morrow, Mr. Thomas Rowan	male	NA	0
## 562	Sivic, Mr. Husein	male	40.0	0
## 563	Norman, Mr. Robert Douglas	male	28.0	0
## 564	Simmons, Mr. John	male	NA	0
## 565	Meanwell, Miss. (Marion Ogden)	female	NA	0
## 566	Davies, Mr. Alfred J	male	24.0	2
## 567	Stoytcheff, Mr. Ilia	male	19.0	0
## 568	Palsson, Mrs. Nils (Alma Cornelia Berglund)	female	29.0	0
## 569	Doharr, Mr. Tannous	male	NA	0
## 575	Rush, Mr. Alfred George John	male	16.0	0
## 576	Patchett, Mr. George	male	19.0	0
## 579	Caram, Mrs. Joseph (Maria Elias)	female	NA	1
## 583	Downton, Mr. William James	male	54.0	0
## 584	Ross, Mr. John Hugo	male	36.0	0
## 585	Paulner, Mr. Uscher	male	NA	0
## 587	Jarvis, Mr. John Denzil	male	47.0	0
## 589	Gilinski, Mr. Eliezer	male	22.0	0
## 590	Murdlin, Mr. Joseph	male	NA	0
## 591	Rintamaki, Mr. Matti	male	35.0	0
## 593	Elsbury, Mr. William James	male	47.0	0
## 594	Bourke, Miss. Mary	female	NA	0
## 595	Chapman, Mr. John Henry	male	37.0	1
## 596	Van Impe, Mr. Jean Baptiste	male	36.0	1
## 598	Johnson, Mr. Alfred	male	49.0	0
## 599	Boulos, Mr. Hanna	male	NA	0
## 602	Slabenoff, Mr. Petco	male	NA	0
## 603	Harrington, Mr. Charles H	male	NA	0
## 604	Torber, Mr. Ernst William	male	44.0	0
## 606	Lindell, Mr. Edvard Bengtsson	male	36.0	1
## 607	Karaic, Mr. Milan	male	30.0	0
## 611	Andersson, Mrs. Anders Johan (Alfrida Konstantia Brogren)	female	39.0	1
## 612	Jardin, Mr. Jose Neto	male	NA	0

## 614	Horgan, Mr. John	male	NA	0
## 615	Brocklebank, Mr. William Alfred	male	35.0	0
## 617	Danbom, Mr. Ernst Gilbert	male	34.0	1
## 618	Lobb, Mrs. William Arthur (Cordelia K Stanlick)	female	26.0	1
## 620	Gavey, Mr. Lawrence	male	26.0	0
## 621	Yasbeck, Mr. Antoni	male	27.0	1
## 624	Hansen, Mr. Henry Damsgaard	male	21.0	0
## 625	Bowen, Mr. David John "Dai"	male	21.0	0
## 626	Sutton, Mr. Frederick	male	61.0	0
## 627	Kirkland, Rev. Charles Leonard	male	57.0	0
## 629	Bostandyeff, Mr. Guentcho	male	26.0	0
## 630	O'Connell, Mr. Patrick D	male	NA	0
## 632	Lundahl, Mr. Johan Svensson	male	51.0	0
## 634	Parr, Mr. William Henry Marsh	male	NA	0
## 635	Skoog, Miss. Mabel	female	9.0	3
## 637	Leinonen, Mr. Antti Gustaf	male	32.0	0
## 638	Collyer, Mr. Harvey	male	31.0	1
## 639	Panula, Mrs. Juha (Maria Emilia Ojala)	female	41.0	0
## 640	Thorneycroft, Mr. Percival	male	NA	1
## 641	Jensen, Mr. Hans Peder	male	20.0	0
## 643	Skoog, Miss. Margit Elizabeth	female	2.0	3
## 647	Cor, Mr. Liudevit	male	19.0	0
## 649	Willey, Mr. Edward	male	NA	0
## 651	Mitkoff, Mr. Mito	male	NA	0
## 653	Kalvik, Mr. Johannes Halvorsen	male	21.0	0
## 655	Hegarty, Miss. Hanora "Nora"	female	18.0	0
## 656	Hickman, Mr. Leonard Mark	male	24.0	2
## 657	Radeff, Mr. Alexander	male	NA	0
## 658	Bourke, Mrs. John (Catherine)	female	32.0	1
## 659	Eitemiller, Mr. George Floyd	male	23.0	0
## 660	Newell, Mr. Arthur Webster	male	58.0	0
## 662	Badt, Mr. Mohamed	male	40.0	0
## 663	Colley, Mr. Edward Pomeroy	male	47.0	0
## 664	Coleff, Mr. Peju	male	36.0	0
## 666	Hickman, Mr. Lewis	male	32.0	2
## 667	Butler, Mr. Reginald Fenton	male	25.0	0
## 668	Rommetvedt, Mr. Knud Paust	male	NA	0
## 669	Cook, Mr. Jacob	male	43.0	0
## 672	Davidson, Mr. Thornton	male	31.0	1
## 673	Mitchell, Mr. Henry Michael	male	70.0	0
## 675	Watson, Mr. Ennis Hastings	male	NA	0
## 676	Edvardsson, Mr. Gustaf Hjalmar	male	18.0	0
## 677	Sawyer, Mr. Frederick Charles	male	24.5	0
## 679	Goodwin, Mrs. Frederick (Augusta Tyler)	female	43.0	1
## 681	Peters, Miss. Katie	female	NA	0
## 683	Olsvigen, Mr. Thor Anderson	male	20.0	0
## 684	Goodwin, Mr. Charles Edward	male	14.0	5
## 685	Brown, Mr. Thomas William Solomon	male	60.0	1
## 686	Laroche, Mr. Joseph Philippe Lemercier	male	25.0	1
## 687	Panula, Mr. Jaako Arnold	male	14.0	4
## 688	Dakic, Mr. Branko	male	19.0	0
## 689	Fischer, Mr. Eberhard Thelander	male	18.0	0
## 694	Saad, Mr. Khalil	male	25.0	0
## 695	Weir, Col. John	male	60.0	0



## 696	Chapman, Mr. Charles Henry	male	52.0	0
## 697	Kelly, Mr. James	male	44.0	0
## 699	Thayer, Mr. John Borland	male	49.0	1
## 700	Humblen, Mr. Adolf Mathias Nicolai Olsen	male	42.0	0
## 703	Barbara, Miss. Saiide	female	18.0	0
## 704	Gallagher, Mr. Martin	male	25.0	0
## 705	Hansen, Mr. Henrik Juul	male	26.0	1
## 706	Morley, Mr. Henry Samuel ("Mr Henry Marshall")	male	39.0	0
## 712	Klaber, Mr. Herman	male	NA	0
## 714	Larsson, Mr. August Viktor	male	29.0	0
## 715	Greenberg, Mr. Samuel	male	52.0	0
## 716	Soholt, Mr. Peter Andreas Lauritz Andersen	male	19.0	0
## 719	McEvoy, Mr. Michael	male	NA	0
## 720	Johnson, Mr. Malkolm Joackim	male	33.0	0
## 722	Jensen, Mr. Svend Lauritz	male	17.0	1
## 723	Gillespie, Mr. William Henry	male	34.0	0
## 724	Hodges, Mr. Henry Price	male	50.0	0
## 726	Oreskovic, Mr. Luka	male	20.0	0
## 729	Bryhl, Mr. Kurt Arnold Gottfrid	male	25.0	1
## 730	Ilmakangas, Miss. Pieta Sofia	female	25.0	1
## 732	Hassan, Mr. Houssein G N	male	11.0	0
## 733	Knight, Mr. Robert J	male	NA	0
## 734	Berriman, Mr. William John	male	23.0	0
## 735	Troupiansky, Mr. Moses Aaron	male	23.0	0
## 736	Williams, Mr. Leslie	male	28.5	0
## 737	Ford, Mrs. Edward (Margaret Ann Watson)	female	48.0	1
## 739	Ivanoff, Mr. Kanio	male	NA	0
## 740	Nankoff, Mr. Minko	male	NA	0
## 742	Cavendish, Mr. Tyrell William	male	36.0	1
## 744	McNamee, Mr. Neal	male	24.0	1
## 746	Crosby, Capt. Edward Gifford	male	70.0	1
## 747	Abbott, Mr. Rossmore Edward	male	16.0	1
## 749	Marvin, Mr. Daniel Warner	male	19.0	1
## 750	Connaghton, Mr. Michael	male	31.0	0
## 753	Vande Velde, Mr. Johannes Joseph	male	33.0	0
## 754	Jonkoff, Mr. Lelio	male	23.0	0
## 757	Carlsson, Mr. August Sigfrid	male	28.0	0
## 758	Bailey, Mr. Percy Andrew	male	18.0	0
## 759	Theobald, Mr. Thomas Leonard	male	34.0	0
## 761	Garfirth, Mr. John	male	NA	0
## 762	Nirva, Mr. Iisakki Antino Aijo	male	41.0	0
## 765	Eklund, Mr. Hans Linus	male	16.0	0
## 767	Brewe, Dr. Arthur Jackson	male	NA	0
## 768	Mangan, Miss. Mary	female	30.5	0
## 769	Moran, Mr. Daniel J	male	NA	1
## 770	Gronnestad, Mr. Daniel Danielsen	male	32.0	0
## 771	Lievens, Mr. Rene Aime	male	24.0	0
## 772	Jensen, Mr. Niels Peder	male	48.0	0
## 773	Mack, Mrs. (Mary)	female	57.0	0
## 774	Elias, Mr. Dibo	male	NA	0
## 776	Myhrman, Mr. Pehr Fabian Oliver Malkolm	male	18.0	0
## 777	Tobin, Mr. Roger	male	NA	0
## 779	Kilgannon, Mr. Thomas J	male	NA	0
## 783	Long, Mr. Milton Clyde	male	29.0	0

## 784	Johnston, Mr. Andrew G	male	NA	1
## 785	Ali, Mr. William	male	25.0	0
## 786	Harmer, Mr. Abraham (David Lishin)	male	25.0	0
## 788	Rice, Master. George Hugh	male	8.0	4
## 790	Guggenheim, Mr. Benjamin	male	46.0	0
## 791	Keane, Mr. Andrew "Andy"	male	NA	0
## 792	Gaskell, Mr. Alfred	male	16.0	0
## 793	Sage, Miss. Stella Anna	female	NA	8
## 794	Hoyt, Mr. William Fisher	male	NA	0
## 795	Dantcheff, Mr. Ristiu	male	25.0	0
## 796	Otter, Mr. Richard	male	39.0	0
## 799	Ibrahim Shawah, Mr. Yousseff	male	30.0	0
## 800	Van Impe, Mrs. Jean Baptiste (Rosalie Paula Govaert)	female	30.0	1
## 801	Ponesell, Mr. Martin	male	34.0	0
## 806	Johansson, Mr. Karl Johan	male	31.0	0
## 807	Andrews, Mr. Thomas Jr	male	39.0	0
## 808	Pettersson, Miss. Ellen Natalia	female	18.0	0
## 809	Meyer, Mr. August	male	39.0	0
## 811	Alexander, Mr. William	male	26.0	0
## 812	Lester, Mr. James	male	39.0	0
## 813	Slemen, Mr. Richard James	male	35.0	0
## 814	Andersson, Miss. Ebba Iris Alfrida	female	6.0	4
## 815	Tomlin, Mr. Ernest Portage	male	30.5	0
## 816	Fry, Mr. Richard	male	NA	0
## 817	Heininen, Miss. Wendla Maria	female	23.0	0
## 818	Mallet, Mr. Albert	male	31.0	1
## 819	Holm, Mr. John Fredrik Alexander	male	43.0	0
## 820	Skoog, Master. Karl Thorsten	male	10.0	3
## 823	Reuchlin, Jonkheer. John George	male	38.0	0
## 825	Panula, Master. Urho Abraham	male	2.0	4
## 826	Flynn, Mr. John	male	NA	0
## 827	Lam, Mr. Len	male	NA	0
## 833	Saad, Mr. Amin	male	NA	0
## 834	Augustsson, Mr. Albert	male	23.0	0
## 835	Allum, Mr. Owen George	male	18.0	0
## 837	Pasic, Mr. Jakob	male	21.0	0
## 838	Sirota, Mr. Maurice	male	NA	0
## 841	Alhomaki, Mr. Ilmari Rudolf	male	20.0	0
## 842	Mudd, Mr. Thomas Charles	male	16.0	0
## 844	Lemberopolous, Mr. Peter L	male	34.5	0
## 845	Culumovic, Mr. Jeso	male	17.0	0
## 846	Abbing, Mr. Anthony	male	42.0	0
## 847	Sage, Mr. Douglas Bullen	male	NA	8
## 848	Markoff, Mr. Marin	male	35.0	0
## 849	Harper, Rev. John	male	28.0	0
## 851	Andersson, Master. Sigvard Harald Elias	male	4.0	4
## 852	Svensson, Mr. Johan	male	74.0	0
## 853	Boulos, Miss. Nourelain	female	9.0	1
## 855	Carter, Mrs. Ernest Courtenay (Lilian Hughes)	female	44.0	1
## 860	Razi, Mr. Raihed	male	NA	0
## 861	Hansen, Mr. Claus Peter	male	41.0	2
## 862	Giles, Mr. Frederick Edward	male	21.0	1
## 864	Sage, Miss. Dorothy Edith "Dolly"	female	NA	8
## 865	Gill, Mr. John William	male	24.0	0

## 868		Roebling, Mr. Washington Augustus II	male	31.0	0
## 869		van Melkebeke, Mr. Philemon	male	NA	0
## 871		Balkic, Mr. Cerin	male	26.0	0
## 873		Carlsson, Mr. Frans Olof	male	33.0	0
## 874		Vander Cruyssen, Mr. Victor	male	47.0	0
## 877		Gustafsson, Mr. Alfred Ossian	male	20.0	0
## 878		Petroff, Mr. Nedelio	male	19.0	0
## 879		Laleff, Mr. Kristo	male	NA	0
## 882		Markun, Mr. Johann	male	33.0	0
## 883		Dahlberg, Miss. Gerda Ulrika	female	22.0	0
## 884		Banfield, Mr. Frederick James	male	28.0	0
## 885		Sutehall, Mr. Henry Jr	male	25.0	0
## 886		Rice, Mrs. William (Margaret Norton)	female	39.0	0
## 887		Montvila, Rev. Juozas	male	27.0	0
## 889		Johnston, Miss. Catherine Helen "Carrie"	female	NA	1
## 891		Dooley, Mr. Patrick	male	32.0	0
##	Parch	Ticket	Fare	Cabin Embarked	
## 1	0	A/5 21171	7.2500	S	
## 5	0	373450	8.0500	S	
## 6	0	330877	8.4583	Q	
## 7	0	17463	51.8625	E46	S
## 8	1	349909	21.0750	S	
## 13	0	A/5. 2151	8.0500	S	
## 14	5	347082	31.2750	S	
## 15	0	350406	7.8542	S	
## 17	1	382652	29.1250	Q	
## 19	0	345763	18.0000	S	
## 21	0	239865	26.0000	S	
## 25	1	349909	21.0750	S	
## 27	0	2631	7.2250	C	
## 28	2	19950	263.0000	C23 C25 C27	S
## 30	0	349216	7.8958	S	
## 31	0	PC 17601	27.7208	C	
## 34	0	C.A. 24579	10.5000	S	
## 35	0	PC 17604	82.1708	C	
## 36	0	113789	52.0000	S	
## 38	0	A./5. 2152	8.0500	S	
## 39	0	345764	18.0000	S	
## 41	0	7546	9.4750	S	
## 42	0	11668	21.0000	S	
## 43	0	349253	7.8958	C	
## 46	0	S.C./A.4. 23567	8.0500	S	
## 47	0	370371	15.5000	Q	
## 49	0	2662	21.6792	C	
## 50	0	349237	17.8000	S	
## 51	1	3101295	39.6875	S	
## 52	0	A/4. 39886	7.8000	S	
## 55	1	113509	61.9792	B30	C
## 58	0	2697	7.2292	C	
## 60	2	CA 2144	46.9000	S	
## 61	0	2669	7.2292	C	
## 63	0	36973	83.4750	C83	S
## 64	2	347088	27.9000	S	
## 65	0	PC 17605	27.7208	C	

## 68	0	S.P. 3464	8.1583		S
## 70	0	315151	8.6625		S
## 71	0	C.A. 33111	10.5000		S
## 72	2	CA 2144	46.9000		S
## 73	0	S.O.C. 14879	73.5000		S
## 74	0	2680	14.4542		C
## 76	0	348123	7.6500	F G73	S
## 77	0	349208	7.8958		S
## 78	0	374746	8.0500		S
## 81	0	345767	9.0000		S
## 84	0	113059	47.1000		S
## 87	3	W./C. 6608	34.3750		S
## 88	0	SOTON/OQ 392086	8.0500		S
## 90	0	343275	8.0500		S
## 91	0	343276	8.0500		S
## 92	0	347466	7.8542		S
## 93	0	W.E.P. 5734	61.1750	E31	S
## 94	2	C.A. 2315	20.5750		S
## 95	0	364500	7.2500		S
## 96	0	374910	8.0500		S
## 97	0	PC 17754	34.6542	A5	C
## 100	0	244367	26.0000		S
## 101	0	349245	7.8958		S
## 102	0	349215	7.8958		S
## 103	1	35281	77.2875	D26	S
## 104	0	7540	8.6542		S
## 105	0	3101276	7.9250		S
## 106	0	349207	7.8958		S
## 109	0	349249	7.8958		S
## 111	0	110465	52.0000	C110	S
## 112	0	2665	14.4542		C
## 113	0	324669	8.0500		S
## 114	0	4136	9.8250		S
## 115	0	2627	14.4583		C
## 116	0	STON/O 2. 3101294	7.9250		S
## 117	0	370369	7.7500		Q
## 118	0	11668	21.0000		S
## 119	1	PC 17558	247.5208	B58 B60	C
## 120	2	347082	31.2750		S
## 121	0	S.O.C. 14879	73.5000		S
## 122	0	A4. 54510	8.0500		S
## 123	0	237736	30.0708		C
## 125	1	35281	77.2875	D26	S
## 127	0	370372	7.7500		Q
## 130	0	347061	6.9750		S
## 131	0	349241	7.8958		C
## 132	0	SOTON/O.Q. 3101307	7.0500		S
## 133	0	A/5. 3337	14.5000		S
## 135	0	C.A. 29178	13.0000		S
## 136	0	SC/PARIS 2133	15.0458		C
## 138	0	113803	53.1000	C123	S
## 139	0	7534	9.2167		S
## 140	0	PC 17593	79.2000	B86	C
## 141	2	2678	15.2458		C

## 144	0	365222	6.7500		Q
## 145	0	231945	11.5000		S
## 146	1	C.A. 33112	36.7500		S
## 148	2	W./C. 6608	34.3750		S
## 149	2	230080	26.0000	F2	S
## 150	0	244310	13.0000		S
## 151	0	S.O.P. 1166	12.5250		S
## 153	0	A.5. 11206	8.0500		S
## 154	2	A/5. 851	14.5000		S
## 155	0	Fa 265302	7.3125		S
## 156	1	PC 17597	61.3792		C
## 158	0	SOTON/OQ 392090	8.0500		S
## 159	0	315037	8.6625		S
## 160	2	CA. 2343	69.5500		S
## 161	1	371362	16.1000		S
## 163	0	347068	7.7750		S
## 164	0	315093	8.6625		S
## 165	1	3101295	39.6875		S
## 168	4	347088	27.9000		S
## 169	0	PC 17318	25.9250		S
## 170	0	1601	56.4958		S
## 171	0	111240	33.5000	B19	S
## 172	1	382652	29.1250		Q
## 174	0	STON/O 2. 3101280	7.9250		S
## 175	0	17764	30.6958	A7	C
## 176	1	350404	7.8542		S
## 177	1	4133	25.4667		S
## 178	0	PC 17595	28.7125	C49	C
## 179	0	250653	13.0000		S
## 180	0	LINE	0.0000		S
## 181	2	CA. 2343	69.5500		S
## 182	0	SC/PARIS 2131	15.0500		C
## 183	2	347077	31.3875		S
## 186	0	113767	50.0000	A32	S
## 189	1	364849	15.5000		Q
## 190	0	349247	7.8958		S
## 192	0	28424	13.0000		S
## 197	0	368703	7.7500		Q
## 198	1	4579	8.4042		S
## 200	0	248747	13.0000		S
## 201	0	345770	9.5000		S
## 202	2	CA. 2343	69.5500		S
## 203	0	3101264	6.4958		S
## 204	0	2628	7.2250		C
## 206	1	347054	10.4625	G6	S
## 207	0	3101278	15.8500		S
## 211	0	SOTON/O.Q. 3101311	7.0500		S
## 213	0	A/5 21174	7.2500		S
## 214	0	250646	13.0000		S
## 215	0	367229	7.7500		Q
## 218	0	243847	27.0000		S
## 220	0	W/C 14208	10.5000		S
## 222	0	220367	13.0000		S
## 223	0	21440	8.0500		S

##	224	0	349234	7.8958		S
##	226	0	PP 4348	9.3500		S
##	228	0	A/5 21173	7.2500		S
##	229	0	236171	13.0000		S
##	230	1	4133	25.4667		S
##	232	0	347067	7.7750		S
##	233	0	237442	13.5000		S
##	235	0	C.A. 29566	10.5000		S
##	236	0	W./C. 6609	7.5500		S
##	237	0	26707	26.0000		S
##	239	0	28665	10.5000		S
##	240	0	SC0/W 1585	12.2750		S
##	241	0	2665	14.4542		C
##	243	0	W./C. 14263	10.5000		S
##	244	0	STON/O 2. 3101275	7.1250		S
##	245	0	2694	7.2250		C
##	246	0	19928	90.0000	C78	Q
##	247	0	347071	7.7750		S
##	250	0	244252	26.0000		S
##	251	0	362316	7.2500		S
##	252	1	347054	10.4625	G6	S
##	253	0	113514	26.5500	C87	S
##	254	0	A/5. 3336	16.1000		S
##	255	2	370129	20.2125		S
##	261	0	384461	7.7500		Q
##	263	1	110413	79.6500	E67	S
##	264	0	112059	0.0000	B94	S
##	265	0	382649	7.7500		Q
##	266	0	C.A. 17248	10.5000		S
##	267	1	3101295	39.6875		S
##	271	0	113798	31.0000		S
##	274	1	PC 17596	29.7000	C118	C
##	277	0	347073	7.7500		S
##	278	0	239853	0.0000		S
##	279	1	382652	29.1250		Q
##	281	0	336439	7.7500		Q
##	282	0	347464	7.8542		S
##	283	0	345778	9.5000		S
##	285	0	113056	26.0000	A19	S
##	286	0	349239	8.6625		C
##	288	0	349206	7.8958		S
##	293	0	SC/Paris 2163	12.8750	D	C
##	294	0	349236	8.8500		S
##	295	0	349233	7.8958		S
##	296	0	PC 17612	27.7208		C
##	297	0	2693	7.2292		C
##	298	2	113781	151.5500	C22 C26	S
##	303	0	LINE	0.0000		S
##	305	0	A/5 2466	8.0500		S
##	309	0	P/PP 3381	24.0000		C
##	313	1	250651	26.0000		S
##	314	0	349243	7.8958		S
##	315	1	F.C.C. 13529	26.2500		S
##	318	0	29011	14.0000		S

## 321	0	A/5 21172	7.2500		S
## 322	0	349219	7.8958		S
## 325	2	CA. 2343	69.5500		S
## 327	0	345364	6.2375		S
## 332	0	113043	28.5000	C124	S
## 333	1	PC 17582	153.4625	C91	S
## 334	0	345764	18.0000		S
## 336	0	349225	7.8958		S
## 337	0	113776	66.6000	C2	S
## 340	0	113784	35.5000	T	S
## 343	0	248740	13.0000		S
## 344	0	244361	13.0000		S
## 345	0	229236	13.0000		S
## 350	0	315088	8.6625		S
## 351	0	7267	9.2250		S
## 352	0	113510	35.0000	C128	S
## 353	1	2695	7.2292		C
## 354	0	349237	17.8000		S
## 355	0	2647	7.2250		C
## 356	0	345783	9.5000		S
## 358	0	237671	13.0000		S
## 361	4	347088	27.9000		S
## 362	0	SC/PARIS 2167	27.7208		C
## 363	1	2691	14.4542		C
## 364	0	SOTON/O.Q. 3101310	7.0500		S
## 365	0	370365	15.5000		Q
## 366	0	C 7076	7.2500		S
## 372	0	3101267	6.4958		S
## 373	0	323951	8.0500		S
## 374	0	PC 17760	135.6333		C
## 375	1	349909	21.0750		S
## 378	2	113503	211.5000	C82	C
## 379	0	2648	4.0125		C
## 380	0	347069	7.7750		S
## 383	0	STON/O 2. 3101293	7.9250		S
## 385	0	349227	7.8958		S
## 386	0	S.O.C. 14879	73.5000		S
## 387	2	CA 2144	46.9000		S
## 389	0	367655	7.7292		Q
## 393	0	3101277	7.9250		S
## 396	0	350052	7.7958		S
## 397	0	350407	7.8542		S
## 398	0	28403	26.0000		S
## 399	0	244278	10.5000		S
## 402	0	341826	8.0500		S
## 403	0	4137	9.8250		S
## 404	0	STON/O2. 3101279	15.8500		S
## 405	0	315096	8.6625		S
## 406	0	28664	21.0000		S
## 407	0	347064	7.7500		S
## 409	0	312992	7.7750		S
## 410	1	4133	25.4667		S
## 411	0	349222	7.8958		S
## 412	0	394140	6.8583		Q

## 414	0	239853	0.0000		S
## 416	0	343095	8.0500		S
## 419	0	28228	13.0000		S
## 420	2	345773	24.1500		S
## 421	0	349254	7.8958		C
## 422	0	A/5. 13032	7.7333		Q
## 423	0	315082	7.8750		S
## 424	1	347080	14.4000		S
## 425	1	370129	20.2125		S
## 426	0	A/4. 34244	7.2500		S
## 429	0	364851	7.7500		Q
## 434	0	STON/O 2. 3101274	7.1250		S
## 435	0	13507	55.9000	E44	S
## 437	2	W./C. 6608	34.3750		S
## 439	4	19950	263.0000	C23 C25 C27	S
## 440	0	C.A. 18723	10.5000		S
## 442	0	345769	9.5000		S
## 443	0	347076	7.7750		S
## 451	2	C.A. 34651	27.7500		S
## 452	0	65303	19.9667		S
## 453	0	113051	27.7500	C111	C
## 455	0	A/5 2817	8.0500		S
## 457	0	13509	26.5500	E38	S
## 460	0	371060	7.7500		Q
## 462	0	364506	8.0500		S
## 463	0	111320	38.5000	E63	S
## 464	0	234360	13.0000		S
## 465	0	A/S 2816	8.0500		S
## 466	0	SOTON/O.Q. 3101306	7.0500		S
## 467	0	239853	0.0000		S
## 468	0	113792	26.5500		S
## 469	0	36209	7.7250		Q
## 471	0	323592	7.2500		S
## 472	0	315089	8.6625		S
## 475	0	7553	9.8375		S
## 476	0	110465	52.0000	A14	S
## 477	0	31027	21.0000		S
## 478	0	3460	7.0458		S
## 479	0	350060	7.5208		S
## 481	2	CA 2144	46.9000		S
## 482	0	239854	0.0000		S
## 483	0	A/5 3594	8.0500		S
## 486	1	4133	25.4667		S
## 488	0	11771	29.7000	B37	C
## 489	0	A.5. 18509	8.0500		S
## 491	0	65304	19.9667		S
## 492	0	SOTON/OQ 3101317	7.2500		S
## 493	0	113787	30.5000	C30	S
## 494	0	PC 17609	49.5042		C
## 495	0	A/4 45380	8.0500		S
## 496	0	2627	14.4583		C
## 498	0	C.A. 6212	15.1000		S
## 499	2	113781	151.5500	C22 C26	S
## 500	0	350035	7.7958		S



##	501	0		315086	8.6625		S
##	502	0		364846	7.7500		Q
##	503	0		330909	7.6292		Q
##	504	0		4135	9.5875		S
##	506	0		PC 17758	108.9000	C65	C
##	509	0		C 4001	22.5250		S
##	512	0	SOTON/OQ	3101316	8.0500		S
##	515	0		349209	7.4958		S
##	516	0		36967	34.0208	D46	S
##	518	0		371110	24.1500		Q
##	520	0		349242	7.8958		S
##	522	0		349252	7.8958		S
##	523	0		2624	7.2250		C
##	525	0		2700	7.2292		C
##	526	0		367232	7.7500		Q
##	528	0		PC 17483	221.7792	C95	S
##	529	0		3101296	7.9250		S
##	530	1		29104	11.5000		S
##	532	0		2641	7.2292		C
##	533	1		2690	7.2292		C
##	535	0		315084	8.6625		S
##	537	0		113050	26.5500	B38	S
##	539	0		364498	14.5000		S
##	542	2		347082	31.2750		S
##	543	2		347082	31.2750		S
##	545	0		PC 17761	106.4250	C86	C
##	546	0		693	26.0000		S
##	549	1		363291	20.5250		S
##	552	0		244358	26.0000		S
##	553	0		330979	7.8292		Q
##	556	0		113807	26.5500		S
##	558	0		PC 17757	227.5250		C
##	561	0		372622	7.7500		Q
##	562	0		349251	7.8958		S
##	563	0		218629	13.5000		S
##	564	0	SOTON/OQ	392082	8.0500		S
##	565	0	SOTON/O.Q.	392087	8.0500		S
##	566	0	A/4	48871	24.1500		S
##	567	0		349205	7.8958		S
##	568	4		349909	21.0750		S
##	569	0		2686	7.2292		C
##	575	0	A/4.	20589	8.0500		S
##	576	0		358585	14.5000		S
##	579	0		2689	14.4583		C
##	583	0		28403	26.0000		S
##	584	0		13049	40.1250	A10	C
##	585	0		3411	8.7125		C
##	587	0		237565	15.0000		S
##	589	0		14973	8.0500		S
##	590	0	A./5.	3235	8.0500		S
##	591	0	STON/O	2. 3101273	7.1250		S
##	593	0		A/5	3902		S
##	594	2		364848	7.7500		Q
##	595	0	SC/AH	29037	26.0000		S

##	596	1	345773	24.1500		S
##	598	0	LINE	0.0000		S
##	599	0	2664	7.2250		C
##	602	0	349214	7.8958		S
##	603	0	113796	42.4000		S
##	604	0	364511	8.0500		S
##	606	0	349910	15.5500		S
##	607	0	349246	7.8958		S
##	611	5	347082	31.2750		S
##	612	0	SOTON/O.Q. 3101305	7.0500		S
##	614	0	370377	7.7500		Q
##	615	0	364512	8.0500		S
##	617	1	347080	14.4000		S
##	618	0	A/5. 3336	16.1000		S
##	620	0	31028	10.5000		S
##	621	0	2659	14.4542		C
##	624	0	350029	7.8542		S
##	625	0	54636	16.1000		S
##	626	0	36963	32.3208	D50	S
##	627	0	219533	12.3500		Q
##	629	0	349224	7.8958		S
##	630	0	334912	7.7333		Q
##	632	0	347743	7.0542		S
##	634	0	112052	0.0000		S
##	635	2	347088	27.9000		S
##	637	0	STON/O 2. 3101292	7.9250		S
##	638	1	C.A. 31921	26.2500		S
##	639	5	3101295	39.6875		S
##	640	0	376564	16.1000		S
##	641	0	350050	7.8542		S
##	643	2	347088	27.9000		S
##	647	0	349231	7.8958		S
##	649	0	S.O./P.P. 751	7.5500		S
##	651	0	349221	7.8958		S
##	653	0	8475	8.4333		S
##	655	0	365226	6.7500		Q
##	656	0	S.O.C. 14879	73.5000		S
##	657	0	349223	7.8958		S
##	658	1	364849	15.5000		Q
##	659	0	29751	13.0000		S
##	660	2	35273	113.2750	D48	C
##	662	0	2623	7.2250		C
##	663	0	5727	25.5875	E58	S
##	664	0	349210	7.4958		S
##	666	0	S.O.C. 14879	73.5000		S
##	667	0	234686	13.0000		S
##	668	0	312993	7.7750		S
##	669	0	A/5 3536	8.0500		S
##	672	0	F.C. 12750	52.0000	B71	S
##	673	0	C.A. 24580	10.5000		S
##	675	0	239856	0.0000		S
##	676	0	349912	7.7750		S
##	677	0	342826	8.0500		S
##	679	6	CA 2144	46.9000		S

## 681	0	330935	8.1375		Q
## 683	0	6563	9.2250		S
## 684	2	CA 2144	46.9000		S
## 685	1	29750	39.0000		S
## 686	2	SC/Paris 2123	41.5792		C
## 687	1	3101295	39.6875		S
## 688	0	349228	10.1708		S
## 689	0	350036	7.7958		S
## 694	0	2672	7.2250		C
## 695	0	113800	26.5500		S
## 696	0	248731	13.5000		S
## 697	0	363592	8.0500		S
## 699	1	17421	110.8833	C68	C
## 700	0	348121	7.6500	F G63	S
## 703	1	2691	14.4542		C
## 704	0	36864	7.7417		Q
## 705	0	350025	7.8542		S
## 706	0	250655	26.0000		S
## 712	0	113028	26.5500	C124	S
## 714	0	7545	9.4833		S
## 715	0	250647	13.0000		S
## 716	0	348124	7.6500	F G73	S
## 719	0	36568	15.5000		Q
## 720	0	347062	7.7750		S
## 722	0	350048	7.0542		S
## 723	0	12233	13.0000		S
## 724	0	250643	13.0000		S
## 726	0	315094	8.6625		S
## 729	0	236853	26.0000		S
## 730	0	STON/02. 3101271	7.9250		S
## 732	0	2699	18.7875		C
## 733	0	239855	0.0000		S
## 734	0	28425	13.0000		S
## 735	0	233639	13.0000		S
## 736	0	54636	16.1000		S
## 737	3	W./C. 6608	34.3750		S
## 739	0	349201	7.8958		S
## 740	0	349218	7.8958		S
## 742	0	19877	78.8500	C46	S
## 744	0	376566	16.1000		S
## 746	1	WE/P 5735	71.0000	B22	S
## 747	1	C.A. 2673	20.2500		S
## 749	0	113773	53.1000	D30	S
## 750	0	335097	7.7500		Q
## 753	0	345780	9.5000		S
## 754	0	349204	7.8958		S
## 757	0	350042	7.7958		S
## 758	0	29108	11.5000		S
## 759	0	363294	8.0500		S
## 761	0	358585	14.5000		S
## 762	0	SOTON/02 3101272	7.1250		S
## 765	0	347074	7.7750		S
## 767	0	112379	39.6000		C
## 768	0	364850	7.7500		Q

## 769	0	371110	24.1500		Q
## 770	0	8471	8.3625		S
## 771	0	345781	9.5000		S
## 772	0	350047	7.8542		S
## 773	0	S.O./P.P. 3	10.5000	E77	S
## 774	0	2674	7.2250		C
## 776	0	347078	7.7500		S
## 777	0	383121	7.7500	F38	Q
## 779	0	36865	7.7375		Q
## 783	0	113501	30.0000	D6	S
## 784	2	W./C. 6607	23.4500		S
## 785	0	SOTON/O.Q. 3101312	7.0500		S
## 786	0	374887	7.2500		S
## 788	1	382652	29.1250		Q
## 790	0	PC 17593	79.2000	B82 B84	C
## 791	0	12460	7.7500		Q
## 792	0	239865	26.0000		S
## 793	2	CA. 2343	69.5500		S
## 794	0	PC 17600	30.6958		C
## 795	0	349203	7.8958		S
## 796	0	28213	13.0000		S
## 799	0	2685	7.2292		C
## 800	1	345773	24.1500		S
## 801	0	250647	13.0000		S
## 806	0	347063	7.7750		S
## 807	0	112050	0.0000	A36	S
## 808	0	347087	7.7750		S
## 809	0	248723	13.0000		S
## 811	0	3474	7.8875		S
## 812	0	A/4 48871	24.1500		S
## 813	0	28206	10.5000		S
## 814	2	347082	31.2750		S
## 815	0	364499	8.0500		S
## 816	0	112058	0.0000	B102	S
## 817	0	STON/O2. 3101290	7.9250		S
## 818	1	S.C./PARIS 2079	37.0042		C
## 819	0	C 7075	6.4500		S
## 820	2	347088	27.9000		S
## 823	0	19972	0.0000		S
## 825	1	3101295	39.6875		S
## 826	0	368323	6.9500		Q
## 827	0	1601	56.4958		S
## 833	0	2671	7.2292		C
## 834	0	347468	7.8542		S
## 835	0	2223	8.3000		S
## 837	0	315097	8.6625		S
## 838	0	392092	8.0500		S
## 841	0	SOTON/O2 3101287	7.9250		S
## 842	0	S.O./P.P. 3	10.5000		S
## 844	0	2683	6.4375		C
## 845	0	315090	8.6625		S
## 846	0	C.A. 5547	7.5500		S
## 847	2	CA. 2343	69.5500		S
## 848	0	349213	7.8958		C

## 849	1	248727	33.0000	S
## 851	2	347082	31.2750	S
## 852	0	347060	7.7750	S
## 853	1	2678	15.2458	C
## 855	0	244252	26.0000	S
## 860	0	2629	7.2292	C
## 861	0	350026	14.1083	S
## 862	0	28134	11.5000	S
## 864	2	CA. 2343	69.5500	S
## 865	0	233866	13.0000	S
## 868	0	PC 17590	50.4958	A24 S
## 869	0	345777	9.5000	S
## 871	0	349248	7.8958	S
## 873	0	695	5.0000	B51 B53 B55 S
## 874	0	345765	9.0000	S
## 877	0	7534	9.8458	S
## 878	0	349212	7.8958	S
## 879	0	349217	7.8958	S
## 882	0	349257	7.8958	S
## 883	0	7552	10.5167	S
## 884	0	C.A./SOTON 34068	10.5000	S
## 885	0	SOTON/OQ 392076	7.0500	S
## 886	5	382652	29.1250	Q
## 887	0	211536	13.0000	S
## 889	2	W./C. 6607	23.4500	S
## 891	0	370376	7.7500	Q

```
head(survived)
```

##	PassengerId	Survived	Pclass		Name	Sex	Age	SibSp	Parch
## 2	2	1	1						
## 3	3	1	3						
## 4	4	1	1						
## 9	9	1	3						
## 10	10	1	2						
## 11	11	1	3						
## 2	Cumings, Mrs. John Bradley (Florence Briggs Thayer)				female	38	1	0	
## 3	Heikkinen, Miss. Laina				female	26	0	0	
## 4	Futrelle, Mrs. Jacques Heath (Lily May Peel)				female	35	1	0	
## 9	Johnson, Mrs. Oscar W (Elisabeth Vilhelmina Berg)				female	27	0	2	
## 10	Nasser, Mrs. Nicholas (Adele Achem)				female	14	1	0	
## 11	Sandstrom, Miss. Marguerite Rut				female	4	1	1	
##	Ticket	Fare	Cabin	Embarked					
## 2	PC 17599	71.2833	C85	C					
## 3	STON/O2.	3101282	7.9250	S					
## 4	113803	53.1000	C123	S					
## 9	347742	11.1333		S					
## 10	237736	30.0708		C					
## 11	PP 9549	16.7000	G6	S					

```
head(dead)
```

##	PassengerId	Survived	Pclass	Name	Sex	Age	SibSp
## 1	1	0	3	Braund, Mr. Owen Harris	male	22	1
## 5	5	0	3	Allen, Mr. William Henry	male	35	0

```
## 6      6      0      3      Moran, Mr. James male NA      0
## 7      7      0      1      McCarthy, Mr. Timothy J male 54      0
## 8      8      0      3      Palsson, Master. Gosta Leonard male 2      3
## 13     13      0      3      Saundercock, Mr. William Henry male 20      0
##      Parch      Ticket      Fare Cabin Embarked
## 1      0 A/5 21171 7.2500      S
## 5      0 373450 8.0500      S
## 6      0 330877 8.4583      Q
## 7      0 17463 51.8625 E46      S
## 8      1 349909 21.0750      S
## 13     0 A/5. 2151 8.0500      S
```

8. The data sets are about the breast cancer Wisconsin. The samples arrive periodically as Dr. Wolberg reports his clinical cases. The database therefore reflects this chronologi [https://drive.google.com/file/d/16MFL0ehCgx2MJuNSAuB2CsBy6eDIHr- u/view?usp=drive\\_link](https://drive.google.com/file/d/16MFL0ehCgx2MJuNSAuB2CsBy6eDIHr- u/view?usp=drive_link))

```
library(readr)
library(pastecs)
library(Hmisc)

breastCancer <- read.csv("breastcancer_wisconsin.csv")
breastCancer
```

```
##      id clump_thickness size_uniformity shape_uniformity marginal_adhesion
## 1 1000025      5      1      1      1
## 2 1002945      5      4      4      5
## 3 1015425      3      1      1      1
## 4 1016277      6      8      8      1
## 5 1017023      4      1      1      3
## 6 1017122      8     10     10      8
## 7 1018099      1      1      1      1
## 8 1018561      2      1      2      1
## 9 1033078      2      1      1      1
## 10 1033078      4      2      1      1
## 11 1035283      1      1      1      1
## 12 1036172      2      1      1      1
## 13 1041801      5      3      3      3
## 14 1043999      1      1      1      1
## 15 1044572      8      7      5     10
## 16 1047630      7      4      6      4
## 17 1048672      4      1      1      1
## 18 1049815      4      1      1      1
## 19 1050670     10      7      7      6
## 20 1050718      6      1      1      1
## 21 1054590      7      3      2     10
## 22 1054593     10      5      5      3
## 23 1056784      3      1      1      1
## 24 1057013      8      4      5      1
## 25 1059552      1      1      1      1
## 26 1065726      5      2      3      4
## 27 1066373      3      2      1      1
## 28 1066979      5      1      1      1
## 29 1067444      2      1      1      1
## 30 1070935      1      1      3      1
## 31 1070935      3      1      1      1
```

## 32	1071760	2	1	1	1
## 33	1072179	10	7	7	3
## 34	1074610	2	1	1	2
## 35	1075123	3	1	2	1
## 36	1079304	2	1	1	1
## 37	1080185	10	10	10	8
## 38	1081791	6	2	1	1
## 39	1084584	5	4	4	9
## 40	1091262	2	5	3	3
## 41	1096800	6	6	6	9
## 42	1099510	10	4	3	1
## 43	1100524	6	10	10	2
## 44	1102573	5	6	5	6
## 45	1103608	10	10	10	4
## 46	1103722	1	1	1	1
## 47	1105257	3	7	7	4
## 48	1105524	1	1	1	1
## 49	1106095	4	1	1	3
## 50	1106829	7	8	7	2
## 51	1108370	9	5	8	1
## 52	1108449	5	3	3	4
## 53	1110102	10	3	6	2
## 54	1110503	5	5	5	8
## 55	1110524	10	5	5	6
## 56	1111249	10	6	6	3
## 57	1112209	8	10	10	1
## 58	1113038	8	2	4	1
## 59	1113483	5	2	3	1
## 60	1113906	9	5	5	2
## 61	1115282	5	3	5	5
## 62	1115293	1	1	1	1
## 63	1116116	9	10	10	1
## 64	1116132	6	3	4	1
## 65	1116192	1	1	1	1
## 66	1116998	10	4	2	1
## 67	1117152	4	1	1	1
## 68	1118039	5	3	4	1
## 69	1120559	8	3	8	3
## 70	1121732	1	1	1	1
## 71	1121919	5	1	3	1
## 72	1123061	6	10	2	8
## 73	1124651	1	3	3	2
## 74	1125035	9	4	5	10
## 75	1126417	10	6	4	1
## 76	1131294	1	1	2	1
## 77	1132347	1	1	4	1
## 78	1133041	5	3	1	2
## 79	1133136	3	1	1	1
## 80	1136142	2	1	1	1
## 81	1137156	2	2	2	1
## 82	1143978	4	1	1	2
## 83	1143978	5	2	1	1
## 84	1147044	3	1	1	1
## 85	1147699	3	5	7	8

## 86	1147748	5	10	6	1
## 87	1148278	3	3	6	4
## 88	1148873	3	6	6	6
## 89	1152331	4	1	1	1
## 90	1155546	2	1	1	2
## 91	1156272	1	1	1	1
## 92	1156948	3	1	1	2
## 93	1157734	4	1	1	1
## 94	1158247	1	1	1	1
## 95	1160476	2	1	1	1
## 96	1164066	1	1	1	1
## 97	1165297	2	1	1	2
## 98	1165790	5	1	1	1
## 99	1165926	9	6	9	2
## 100	1166630	7	5	6	10
## 101	1166654	10	3	5	1
## 102	1167439	2	3	4	4
## 103	1167471	4	1	2	1
## 104	1168359	8	2	3	1
## 105	1168736	10	10	10	10
## 106	1169049	7	3	4	4
## 107	1170419	10	10	10	8
## 108	1170420	1	6	8	10
## 109	1171710	1	1	1	1
## 110	1171710	6	5	4	4
## 111	1171795	1	3	1	2
## 112	1171845	8	6	4	3
## 113	1172152	10	3	3	10
## 114	1173216	10	10	10	3
## 115	1173235	3	3	2	1
## 116	1173347	1	1	1	1
## 117	1173347	8	3	3	1
## 118	1173509	4	5	5	10
## 119	1173514	1	1	1	1
## 120	1173681	3	2	1	1
## 121	1174057	1	1	2	2
## 122	1174057	4	2	1	1
## 123	1174131	10	10	10	2
## 124	1174428	5	3	5	1
## 125	1175937	5	4	6	7
## 126	1176406	1	1	1	1
## 127	1176881	7	5	3	7
## 128	1177027	3	1	1	1
## 129	1177399	8	3	5	4
## 130	1177512	1	1	1	1
## 131	1178580	5	1	3	1
## 132	1179818	2	1	1	1
## 133	1180194	5	10	8	10
## 134	1180523	3	1	1	1
## 135	1180831	3	1	1	1
## 136	1181356	5	1	1	1
## 137	1182404	4	1	1	1
## 138	1182410	3	1	1	1
## 139	1183240	4	1	2	1



## 140	1183246	1	1	1	1
## 141	1183516	3	1	1	1
## 142	1183911	2	1	1	1
## 143	1183983	9	5	5	4
## 144	1184184	1	1	1	1
## 145	1184241	2	1	1	1
## 146	1184840	1	1	3	1
## 147	1185609	3	4	5	2
## 148	1185610	1	1	1	1
## 149	1187457	3	1	1	3
## 150	1187805	8	8	7	4
## 151	1188472	1	1	1	1
## 152	1189266	7	2	4	1
## 153	1189286	10	10	8	6
## 154	1190394	4	1	1	1
## 155	1190485	1	1	1	1
## 156	1192325	5	5	5	6
## 157	1193091	1	2	2	1
## 158	1193210	2	1	1	1
## 159	1193683	1	1	2	1
## 160	1196295	9	9	10	3
## 161	1196915	10	7	7	4
## 162	1197080	4	1	1	1
## 163	1197270	3	1	1	1
## 164	1197440	1	1	1	2
## 165	1197510	5	1	1	1
## 166	1197979	4	1	1	1
## 167	1197993	5	6	7	8
## 168	1198128	10	8	10	10
## 169	1198641	3	1	1	1
## 170	1199219	1	1	1	2
## 171	1199731	3	1	1	1
## 172	1199983	1	1	1	1
## 173	1200772	1	1	1	1
## 174	1200847	6	10	10	10
## 175	1200892	8	6	5	4
## 176	1200952	5	8	7	7
## 177	1201834	2	1	1	1
## 178	1201936	5	10	10	3
## 179	1202125	4	1	1	1
## 180	1202812	5	3	3	3
## 181	1203096	1	1	1	1
## 182	1204242	1	1	1	1
## 183	1204898	6	1	1	1
## 184	1205138	5	8	8	8
## 185	1205579	8	7	6	4
## 186	1206089	2	1	1	1
## 187	1206695	1	5	8	6
## 188	1206841	10	5	6	10
## 189	1207986	5	8	4	10
## 190	1208301	1	2	3	1
## 191	1210963	10	10	10	8
## 192	1211202	7	5	10	10
## 193	1212232	5	1	1	1

## 194	1212251	1	1	1	1
## 195	1212422	3	1	1	1
## 196	1212422	4	1	1	1
## 197	1213375	8	4	4	5
## 198	1213383	5	1	1	4
## 199	1214092	1	1	1	1
## 200	1214556	3	1	1	1
## 201	1214966	9	7	7	5
## 202	1216694	10	8	8	4
## 203	1216947	1	1	1	1
## 204	1217051	5	1	1	1
## 205	1217264	1	1	1	1
## 206	1218105	5	10	10	9
## 207	1218741	10	10	9	3
## 208	1218860	1	1	1	1
## 209	1218860	1	1	1	1
## 210	1219406	5	1	1	1
## 211	1219525	8	10	10	10
## 212	1219859	8	10	8	8
## 213	1220330	1	1	1	1
## 214	1221863	10	10	10	10
## 215	1222047	10	10	10	10
## 216	1222936	8	7	8	7
## 217	1223282	1	1	1	1
## 218	1223426	1	1	1	1
## 219	1223793	6	10	7	7
## 220	1223967	6	1	3	1
## 221	1224329	1	1	1	2
## 222	1225799	10	6	4	3
## 223	1226012	4	1	1	3
## 224	1226612	7	5	6	3
## 225	1227210	10	5	5	6
## 226	1227244	1	1	1	1
## 227	1227481	10	5	7	4
## 228	1228152	8	9	9	5
## 229	1228311	1	1	1	1
## 230	1230175	10	10	10	3
## 231	1230688	7	4	7	4
## 232	1231387	6	8	7	5
## 233	1231706	8	4	6	3
## 234	1232225	10	4	5	5
## 235	1236043	3	3	2	1
## 236	1241232	3	1	4	1
## 237	1241559	10	8	8	2
## 238	1241679	9	8	8	5
## 239	1242364	8	10	10	8
## 240	1243256	10	4	3	2
## 241	1270479	5	1	3	3
## 242	1276091	3	1	1	3
## 243	1277018	2	1	1	1
## 244	128059	1	1	1	1
## 245	1285531	1	1	1	1
## 246	1287775	5	1	1	2
## 247	144888	8	10	10	8

## 248	145447	8	4	4	1
## 249	167528	4	1	1	1
## 250	169356	3	1	1	1
## 251	183913	1	2	2	1
## 252	191250	10	4	4	10
## 253	1017023	6	3	3	5
## 254	1100524	6	10	10	2
## 255	1116116	9	10	10	1
## 256	1168736	5	6	6	2
## 257	1182404	3	1	1	1
## 258	1182404	3	1	1	1
## 259	1198641	3	1	1	1
## 260	242970	5	7	7	1
## 261	255644	10	5	8	10
## 262	263538	5	10	10	6
## 263	274137	8	8	9	4
## 264	303213	10	4	4	10
## 265	314428	7	9	4	10
## 266	1182404	5	1	4	1
## 267	1198641	10	10	6	3
## 268	320675	3	3	5	2
## 269	324427	10	8	8	2
## 270	385103	1	1	1	1
## 271	390840	8	4	7	1
## 272	411453	5	1	1	1
## 273	320675	3	3	5	2
## 274	428903	7	2	4	1
## 275	431495	3	1	1	1
## 276	432809	3	1	3	1
## 277	434518	3	1	1	1
## 278	452264	1	1	1	1
## 279	456282	1	1	1	1
## 280	476903	10	5	7	3
## 281	486283	3	1	1	1
## 282	486662	2	1	1	2
## 283	488173	1	4	3	10
## 284	492268	10	4	6	1
## 285	508234	7	4	5	10
## 286	527363	8	10	10	10
## 287	529329	10	10	10	10
## 288	535331	3	1	1	1
## 289	543558	6	1	3	1
## 290	555977	5	6	6	8
## 291	560680	1	1	1	1
## 292	561477	1	1	1	1
## 293	563649	8	8	8	1
## 294	601265	10	4	4	6
## 295	606140	1	1	1	1
## 296	606722	5	5	7	8
## 297	616240	5	3	4	3
## 298	61634	5	4	3	1
## 299	625201	8	2	1	1
## 300	63375	9	1	2	6
## 301	635844	8	4	10	5

## 302	636130	1	1	1	1
## 303	640744	10	10	10	7
## 304	646904	1	1	1	1
## 305	653777	8	3	4	9
## 306	659642	10	8	4	4
## 307	666090	1	1	1	1
## 308	666942	1	1	1	1
## 309	667204	7	8	7	6
## 310	673637	3	1	1	1
## 311	684955	2	1	1	1
## 312	688033	1	1	1	1
## 313	691628	8	6	4	10
## 314	693702	1	1	1	1
## 315	704097	1	1	1	1
## 316	704168	4	6	5	6
## 317	706426	5	5	5	2
## 318	709287	6	8	7	8
## 319	718641	1	1	1	1
## 320	721482	4	4	4	4
## 321	730881	7	6	3	2
## 322	733639	3	1	1	1
## 323	733639	3	1	1	1
## 324	733823	5	4	6	10
## 325	740492	1	1	1	1
## 326	743348	3	2	2	1
## 327	752904	10	1	1	1
## 328	756136	1	1	1	1
## 329	760001	8	10	3	2
## 330	760239	10	4	6	4
## 331	76389	10	4	7	2
## 332	764974	5	1	1	1
## 333	770066	5	2	2	2
## 334	785208	5	4	6	6
## 335	785615	8	6	7	3
## 336	792744	1	1	1	1
## 337	797327	6	5	5	8
## 338	798429	1	1	1	1
## 339	704097	1	1	1	1
## 340	806423	8	5	5	5
## 341	809912	10	3	3	1
## 342	810104	1	1	1	1
## 343	814265	2	1	1	1
## 344	814911	1	1	1	1
## 345	822829	7	6	4	8
## 346	826923	1	1	1	1
## 347	830690	5	2	2	2
## 348	831268	1	1	1	1
## 349	832226	3	4	4	10
## 350	832567	4	2	3	5
## 351	836433	5	1	1	3
## 352	837082	2	1	1	1
## 353	846832	3	4	5	3
## 354	850831	2	7	10	10
## 355	855524	1	1	1	1

## 356	857774	4	1	1	1
## 357	859164	5	3	3	1
## 358	859350	8	10	10	7
## 359	866325	8	10	5	3
## 360	873549	10	3	5	4
## 361	877291	6	10	10	10
## 362	877943	3	10	3	10
## 363	888169	3	2	2	1
## 364	888523	4	4	4	2
## 365	896404	2	1	1	1
## 366	897172	2	1	1	1
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## 672	2	1	3	1	1	2
## 673	2	1	3	1	1	2
## 674	3	1	1	1	1	2
## 675	2	1	2	1	1	2
## 676	2	1	1	1	1	2
## 677	2	1	2	1	1	2
## 678	2	1	1	1	1	2
## 679	2	1	1	1	1	2
## 680	2	1	1	1	1	2
## 681	5	10	10	10	7	4

```
## 682      4      10      5      6      3      4
## 683      2       1      3      2      1      2
## 684      2       1      1      1      1      2
## 685      2       1      1      1      1      2
## 686      2       1      1      1      1      2
## 687      2       1      1      1      1      2
## 688      2       1      2      3      1      2
## 689      2       1      1      1      1      2
## 690      2       1      1      1      8      2
## 691      2       1      1      1      1      2
## 692      4       5      4      4      1      4
## 693      2       1      1      1      1      2
## 694      2       1      2      1      2      2
## 695      3       2      1      1      1      2
## 696      2       1      1      1      1      2
## 697      7       3      8     10      2      4
## 698      3       4     10      6      1      4
## 699      4       5     10      4      1      4
```

```
breastCancerStats <- stat.desc(breastCancer)
breastCancerStats
```

```
##              id clump_thickness size_uniformity shape_uniformity
## nbr.val      6.990000e+02    699.0000000    699.0000000    699.0000000
## nbr.null     0.000000e+00     0.0000000     0.0000000     0.0000000
## nbr.na       0.000000e+00     0.0000000     0.0000000     0.0000000
## min         6.163400e+04     1.0000000     1.0000000     1.0000000
## max         1.345435e+07    10.0000000    10.0000000    10.0000000
## range       1.339272e+07     9.0000000     9.0000000     9.0000000
## sum         7.491212e+08    3088.0000000    2191.0000000    2242.0000000
## median      1.171710e+06     4.0000000     1.0000000     1.0000000
## mean        1.071704e+06     4.4177396     3.1344778     3.2074392
## SE.mean     2.334070e+04     0.1065011     0.1154168     0.1124081
## CI.mean.0.95 4.582640e+04     0.2091009     0.2266057     0.2206984
## var         3.808071e+11     7.9283955     9.3114027     8.8322655
## std.dev     6.170957e+05     2.8157407     3.0514591     2.9719128
## coef.var     5.758079e-01     0.6373713     0.9735143     0.9265687
##
##      marginal_adhesion epithelial_size bare_nucleoli bland_chromatin
## nbr.val      699.0000000    6.990000e+02      NA    6.990000e+02
## nbr.null     0.0000000     0.000000e+00      NA    0.000000e+00
## nbr.na       0.0000000     0.000000e+00      NA    0.000000e+00
## min         1.0000000     1.000000e+00      NA    1.000000e+00
## max         10.0000000     1.000000e+01      NA    1.000000e+01
## range       9.0000000     9.000000e+00      NA    9.000000e+00
## sum         1962.0000000    2.248000e+03      NA    2.403000e+03
## median      1.0000000     2.000000e+00      NA    3.000000e+00
## mean        2.8068670     3.216023e+00      NA    3.437768e+00
## SE.mean     0.1080004     8.375251e-02      NA    9.222741e-02
## CI.mean.0.95 0.2120445     1.644370e-01      NA    1.810764e-01
## var         8.1531906     4.903124e+00      NA    5.945620e+00
## std.dev     2.8553792     2.214300e+00      NA    2.438364e+00
## coef.var     1.0172834     6.885212e-01      NA    7.092870e-01
##
##      normal_nucleoli      mitoses      class
## nbr.val      699.0000000  6.990000e+02  6.990000e+02
## nbr.null     0.0000000  0.000000e+00  0.000000e+00
```



```
## nbr.na          0.0000000 0.000000e+00 0.000000e+00
## min            1.0000000 1.000000e+00 2.000000e+00
## max           10.0000000 1.000000e+01 4.000000e+00
## range          9.0000000 9.000000e+00 2.000000e+00
## sum            2004.0000000 1.111000e+03 1.880000e+03
## median         1.0000000 1.000000e+00 2.000000e+00
## mean           2.8669528 1.589413e+00 2.689557e+00
## SE.mean        0.1154990 6.487021e-02 3.598043e-02
## CI.mean.0.95   0.2267672 1.273641e-01 7.064284e-02
## var            9.3246800 2.941492e+00 9.049194e-01
## std.dev        3.0536339 1.715078e+00 9.512725e-01
## coef.var       1.0651148 1.079063e+00 3.536912e-01
```

```
clump_thickness_SEmean <- breastCancerStats["SE.mean", "clump_thickness"]
clump_thickness_SEmean
```

```
## [1] 0.1065011
```

```
marginal_adhesion_coefVar <- breastCancerStats["coef.var", "marginal_adhesion"]
marginal_adhesion_coefVar
```

```
## [1] 1.017283
```

```
bare_nucleoli_null <- breastCancerStats["nbr.null", "bare_nucleoli"]
bare_nucleoli_null
```

```
## [1] NA
```

```
bland_chromatin_mean <- breastCancerStats["mean", "bland_chromatin"]
bland_chromatin_mean
```

```
## [1] 3.437768
```

```
bland_chromatin_std_dev <- breastCancerStats["std.dev", "bland_chromatin"]
bland_chromatin_std_dev
```

```
## [1] 2.438364
```

```
shape_uniformity_CImean <- breastCancerStats["CI.mean", "shape_uniformity"]
shape_uniformity_CImean
```

```
## [1] 0.2206984
```

d. How many attributes?

```
num_attributes <- ncol(breastCancer)
num_attributes
```

```
## [1] 11
```

e. Find the percentage of respondents who are malignant. Interpret the results.

```
# Assuming class 4 is malignant
```

```
percentage_malignant <- (sum(breastCancer$class == 4) / nrow(breastCancer)) * 100
paste0("Percentage of Respondents who are Malignant: ", percentage_malignant,"%")
```

```
## [1] "Percentage of Respondents who are Malignant: 34.4778254649499%"
```

9. Export the data abalone to the Microsoft excel file. Copy the codes.

```
install.packages("AppliedPredictiveModeling") library("AppliedPredictiveModeling") view(abalone)
head(abalone) summary(abalone)
```

```
#install.packages("AppliedPredictiveModeling")
```

```
library("AppliedPredictiveModeling")
library("xlsx")
```

```
data(abalone)
```

```
#View(abalone)
```

```
head(abalone)
```

```
##      Type LongestShell Diameter Height WholeWeight ShuckedWeight VisceraWeight
## 1      M          0.455    0.365  0.095     0.5140          0.2245          0.1010
## 2      M          0.350    0.265  0.090     0.2255          0.0995          0.0485
## 3      F          0.530    0.420  0.135     0.6770          0.2565          0.1415
## 4      M          0.440    0.365  0.125     0.5160          0.2155          0.1140
## 5      I          0.330    0.255  0.080     0.2050          0.0895          0.0395
## 6      I          0.425    0.300  0.095     0.3515          0.1410          0.0775
##      ShellWeight Rings
## 1          0.150    15
## 2          0.070     7
## 3          0.210     9
## 4          0.155    10
## 5          0.055     7
## 6          0.120     8
```

```
summary(abalone)
```

```
##      Type      LongestShell      Diameter      Height      WholeWeight
## F:1307  Min.       :0.075    Min.       :0.0550  Min.       :0.0000  Min.       :0.0020
## I:1342  1st Qu.:0.450    1st Qu.:0.3500  1st Qu.:0.1150  1st Qu.:0.4415
## M:1528  Median :0.545    Median :0.4250  Median :0.1400  Median :0.7995
##          Mean  :0.524    Mean  :0.4079  Mean  :0.1395  Mean  :0.8287
##          3rd Qu.:0.615    3rd Qu.:0.4800  3rd Qu.:0.1650  3rd Qu.:1.1530
##          Max.   :0.815    Max.   :0.6500  Max.   :1.1300  Max.   :2.8255
## ShuckedWeight  VisceraWeight  ShellWeight  Rings
## Min.       :0.0010  Min.       :0.0005  Min.       :0.0015  Min.       : 1.000
## 1st Qu.:0.1860  1st Qu.:0.0935  1st Qu.:0.1300  1st Qu.: 8.000
## Median :0.3360  Median :0.1710  Median :0.2340  Median : 9.000
## Mean  :0.3594  Mean  :0.1806  Mean  :0.2388  Mean  : 9.934
## 3rd Qu.:0.5020  3rd Qu.:0.2530  3rd Qu.:0.3290  3rd Qu.:11.000
## Max.   :1.4880  Max.   :0.7600  Max.   :1.0050  Max.   :29.000
```

```
#write.xlsx(abalone, "abalone.xlsx")
```