**#Binning**

> library(MASS)

> library(caret)

> library(dplyr)

> Data1 <- read.csv("C:/Statistics/Final Dataset/kiwc.csv",header=TRUE)

> head(Data1)

name main\_category deadline goal launched state backers

1 Acting Out Yoga Presents: Anna in Paris Publishing 7/2/2012 23:08 1500 6/2/2012 23:08 failed 0

2 Auto Icon Screen Prints Design 3/18/2015 1:00 1500 2/12/2015 19:20 successful 971

3 Peter Squires' New 7" Record - Recorded by Steve Albini! Music 2/1/2016 3:00 500 1/5/2016 20:40 successful 31

4 Much Ado About Nothing Theater 4/30/2012 22:00 6000 3/29/2012 15:08 failed 9

5 Bacon Food 9/9/2014 21:18 23 7/11/2014 21:18 failed 0

6 MARLEY WAS DEAD Publishing 8/1/2013 19:00 4000 7/1/2013 19:00 successful 99

.data\_Film...Video .data\_Music .data\_Food .data\_Crafts .data\_Games .data\_Design .data\_Comics .data\_Publishing .data\_Fashion

1 0 0 0 0 0 0 0 1 0

2 0 0 0 0 0 1 0 0 0

3 0 1 0 0 0 0 0 0 0

4 0 0 0 0 0 0 0 0 0

5 0 0 1 0 0 0 0 0 0

6 0 0 0 0 0 0 0 1 0

.data\_Theater .data\_Art .data\_Photography .data\_Technology .data\_Dance .data\_Journalism Season Prj\_Name\_Length Duration

1 0 0 0 0 0 0 Summer 39 30

2 0 0 0 0 0 0 Winter 23 34

3 0 0 0 0 0 0 Winter 56 27

4 1 0 0 0 0 0 Spring 22 32

5 0 0 0 0 0 0 Summer 5 60

6 0 0 0 0 0 0 Summer 15 31

Launched\_Year Deadline\_Year

1 2012 2012

2 2015 2015

3 2016 2016

4 2012 2012

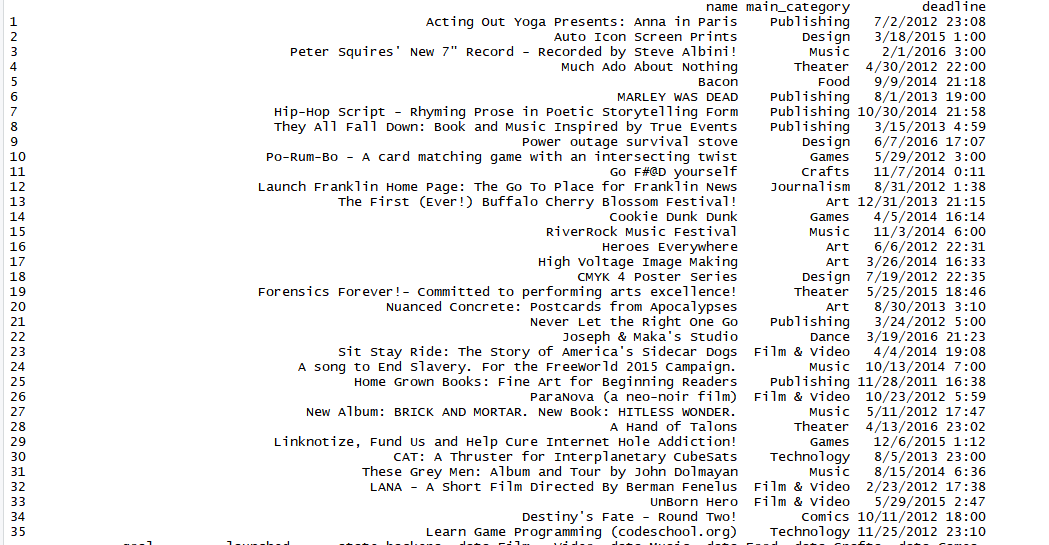
5 2014 2014

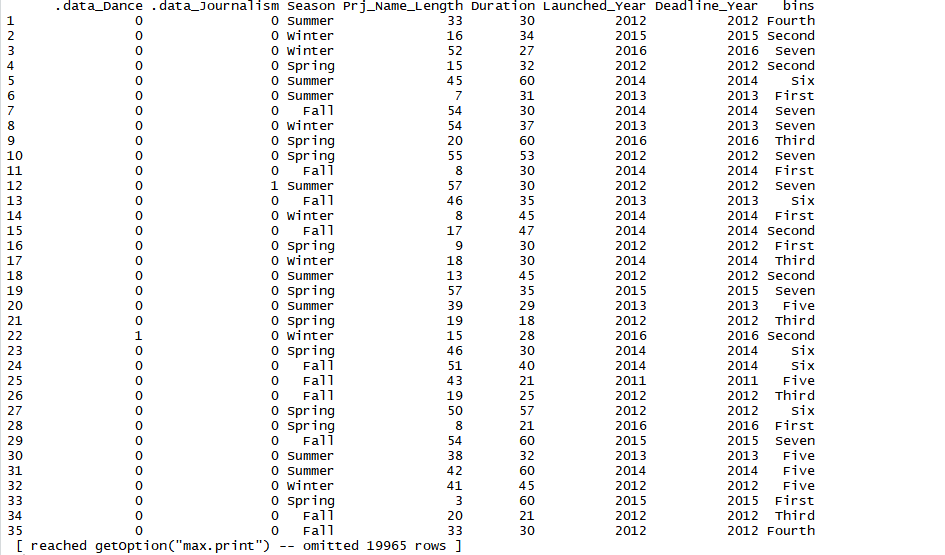
6 2013 2013

> Data1$bins<-cut(Prj\_Name\_Length,10,labels=c("First","Second","Third","Fourth","Five","Six","Seven","eight","nine","ten"))

> Data1

# WE have put the screen shot as pasting it directly from console did not give proper display





[ reached getOption("max.print") -- omitted 19965 rows ]

**# 10 Fold Cross Validation**

> Train <- createDataPartition(Data1$state, p=0.7, list=FALSE)

> training <- Data1[ Train, ]

> testing <- Data1[ -Train, ]

> ctrl <- trainControl(method = "repeatedcv", number = 10, savePredictions = TRUE)

> mod\_fit <- train(state ~ main\_category+goal+Season+Launched\_Year+Duration+Deadline\_Year,data=Data1, method="glm", family="binomial",trControl = ctrl, tuneLength = 5)

There were 11 warnings (use warnings() to see them)

> pred = predict(mod\_fit, newdata=testing)

> confusionMatrix(data=pred, testing$state)

Confusion Matrix and Statistics

Reference

Prediction failed successful

failed 2752 1427

successful 747 1073

Accuracy : 0.6376

95% CI : (0.6253, 0.6498)

No Information Rate : 0.5833

P-Value [Acc > NIR] : < 2.2e-16

Kappa : 0.2244

Mcnemar's Test P-Value : < 2.2e-16

Sensitivity : 0.7865

Specificity : 0.4292

Pos Pred Value : 0.6585

Neg Pred Value : 0.5896

Prevalence : 0.5833

Detection Rate : 0.4587

Detection Prevalence : 0.6966

Balanced Accuracy : 0.6079

'Positive' Class : failed

**# Logistic Regression with Binning**

> dim(Data1)

[1] 20000 28

> smp\_size <- floor(0.70 \* nrow(Data1))

> set.seed(123)

> train\_ind <- sample(seq\_len(nrow(Data1)), size = smp\_size)

> train <- Data1[train\_ind, ]

> test <- Data1[-train\_ind, ]

> dim(train)

[1] 14000 28

> dim(test)

[1] 6000 28

> summary(Data1)

name main\_category deadline goal launched state

#NAME? : 5 Film & Video:3711 6/2/2012 5:59 : 6 Min. : 1 3/26/2013 20:46: 3 failed :11664

Facade : 2 Music :3229 9/1/2010 5:59 : 6 1st Qu.: 2000 8/12/2013 22:10: 3 successful: 8336

Keys to the City: 2 Publishing :2221 1/1/2012 8:59 : 4 Median : 5000 1/10/2013 20:46: 2

Music Video : 2 Art :1635 11/1/2014 4:59: 4 Mean : 38148 1/14/2015 3:01 : 2

My First Film : 2 Games :1486 12/1/2014 8:59: 4 3rd Qu.: 15000 1/15/2013 16:01: 2

Pangaea : 2 Design :1322 3/1/2012 3:00 : 4 Max. :100000000 1/15/2015 1:13 : 2

(Other) :19985 (Other) :6396 (Other) :19972 (Other) :19986

backers .data\_Film...Video .data\_Music .data\_Food .data\_Crafts .data\_Games .data\_Design

Min. : 0.0 Min. :0.0000 Min. :0.0000 Min. :0.0000 Min. :0.0000 Min. :0.0000 Min. :0.0000

1st Qu.: 2.0 1st Qu.:0.0000 1st Qu.:0.0000 1st Qu.:0.0000 1st Qu.:0.0000 1st Qu.:0.0000 1st Qu.:0.0000

Median : 17.0 Median :0.0000 Median :0.0000 Median :0.0000 Median :0.0000 Median :0.0000 Median :0.0000

Mean : 113.2 Mean :0.1855 Mean :0.1615 Mean :0.0656 Mean :0.0232 Mean :0.0743 Mean :0.0661

3rd Qu.: 65.0 3rd Qu.:0.0000 3rd Qu.:0.0000 3rd Qu.:0.0000 3rd Qu.:0.0000 3rd Qu.:0.0000 3rd Qu.:0.0000

Max. :105857.0 Max. :1.0000 Max. :1.0000 Max. :1.0000 Max. :1.0000 Max. :1.0000 Max. :1.0000

.data\_Comics .data\_Publishing .data\_Fashion .data\_Theater .data\_Art .data\_Photography .data\_Technology

Min. :0.0000 Min. :0.000 Min. :0.0000 Min. :0.00000 Min. :0.00000 Min. :0.00000 Min. :0.0000

1st Qu.:0.0000 1st Qu.:0.000 1st Qu.:0.0000 1st Qu.:0.00000 1st Qu.:0.00000 1st Qu.:0.00000 1st Qu.:0.0000

Median :0.0000 Median :0.000 Median :0.0000 Median :0.00000 Median :0.00000 Median :0.00000 Median :0.0000

Mean :0.0319 Mean :0.111 Mean :0.0518 Mean :0.03195 Mean :0.08175 Mean :0.02845 Mean :0.0627

3rd Qu.:0.0000 3rd Qu.:0.000 3rd Qu.:0.0000 3rd Qu.:0.00000 3rd Qu.:0.00000 3rd Qu.:0.00000 3rd Qu.:0.0000

Max. :1.0000 Max. :1.000 Max. :1.0000 Max. :1.00000 Max. :1.00000 Max. :1.00000 Max. :1.0000

.data\_Dance .data\_Journalism Season Prj\_Name\_Length.Prj\_Name\_Length Duration Launched\_Year Deadline\_Year

Min. :0.00000 Min. :0.00000 Fall :4930 Min. : 1.00000 Min. : 1.0 Min. :2009 Min. :2009

1st Qu.:0.00000 1st Qu.:0.00000 Spring:5319 1st Qu.:16.00000 1st Qu.:30.0 1st Qu.:2012 1st Qu.:2012

Median :0.00000 Median :0.00000 Summer:5539 Median :29.00000 Median :30.0 Median :2014 Median :2014

Mean :0.01265 Mean :0.01155 Winter:4212 Mean :30.87895 Mean :34.5 Mean :2013 Mean :2014

3rd Qu.:0.00000 3rd Qu.:0.00000 3rd Qu.:46.00000 3rd Qu.:38.0 3rd Qu.:2015 3rd Qu.:2015

Max. :1.00000 Max. :1.00000 Max. :85.00000 Max. :92.0 Max. :2016 Max. :2016

bins

Third :3300

Five :3066

Second :2961

First :2728

Fourth :2552

Seven :2397

(Other):2996

> contrasts(Data1$state)

successful

failed 0

successful 1

> glm.fits <- glm(state~main\_category+backers+Season+goal+Launched\_Year+Deadline\_Year+Duration+bins,data=Data1,family=binomial,control=list(maxit=100),subset=unlist(train))

Warning message:

glm.fit: fitted probabilities numerically 0 or 1 occurred

> summary(glm.fits)

Call:

glm(formula = state ~ main\_category + backers + Season + goal +

Launched\_Year + Deadline\_Year + Duration + bins, family = binomial,

data = Data1, subset = unlist(train), control = list(maxit = 100))

Deviance Residuals:

Min 1Q Median 3Q Max

-8.4904 -0.2658 -0.0108 0.1565 8.4904

Coefficients:

Estimate Std. Error z value Pr(>|z|)

(Intercept) 7.960e+01 1.445e+01 5.508 3.63e-08 \*\*\*

main\_categoryComics -3.833e-01 7.970e-02 -4.810 1.51e-06 \*\*\*

main\_categoryCrafts -1.439e-01 6.604e-02 -2.178 0.02937 \*

main\_categoryDance 2.529e-01 9.487e-02 2.666 0.00767 \*\*

main\_categoryDesign -6.821e-01 7.891e-02 -8.644 < 2e-16 \*\*\*

main\_categoryFashion 5.502e-01 7.678e-02 7.166 7.74e-13 \*\*\*

main\_categoryFilm & Video 1.274e+00 4.910e-02 25.937 < 2e-16 \*\*\*

main\_categoryFood -1.453e+00 6.062e-02 -23.972 < 2e-16 \*\*\*

main\_categoryGames -3.047e-01 6.748e-02 -4.515 6.33e-06 \*\*\*

main\_categoryJournalism -8.160e-01 1.204e-01 -6.778 1.22e-11 \*\*\*

main\_categoryMusic 2.666e+00 4.630e-02 57.586 < 2e-16 \*\*\*

main\_categoryPhotography 1.024e+00 7.429e-02 13.788 < 2e-16 \*\*\*

main\_categoryPublishing -7.609e-01 4.771e-02 -15.948 < 2e-16 \*\*\*

main\_categoryTechnology -5.366e+00 1.782e-01 -30.121 < 2e-16 \*\*\*

main\_categoryTheater -2.843e-01 6.013e-02 -4.729 2.26e-06 \*\*\*

backers 7.040e-02 4.613e-04 152.620 < 2e-16 \*\*\*

SeasonSpring 1.402e+00 3.332e-02 42.068 < 2e-16 \*\*\*

SeasonSummer -6.228e-04 3.290e-02 -0.019 0.98490

SeasonWinter 6.015e-01 3.762e-02 15.990 < 2e-16 \*\*\*

goal -4.305e-04 2.807e-06 -153.389 < 2e-16 \*\*\*

Launched\_Year 2.382e+00 4.863e-02 48.979 < 2e-16 \*\*\*

Deadline\_Year -2.422e+00 4.850e-02 -49.948 < 2e-16 \*\*\*

Duration 6.999e-03 9.381e-04 7.460 8.63e-14 \*\*\*

binsSecond -1.551e-02 4.206e-02 -0.369 0.71224

binsThird -2.500e-01 4.270e-02 -5.854 4.79e-09 \*\*\*

binsFourth -8.380e-01 4.501e-02 -18.618 < 2e-16 \*\*\*

binsFive 7.183e-01 4.383e-02 16.390 < 2e-16 \*\*\*

binsSix 1.047e+00 4.344e-02 24.103 < 2e-16 \*\*\*

binsSeven 1.311e-01 4.247e-02 3.087 0.00203 \*\*

binseight 6.661e-01 1.688e-01 3.947 7.92e-05 \*\*\*

binsnine 5.423e-01 3.105e-01 1.746 0.08075 .

binsten 2.379e+00 8.455e-02 28.138 < 2e-16 \*\*\*

---

Signif. codes: 0 ‘\*\*\*’ 0.001 ‘\*\*’ 0.01 ‘\*’ 0.05 ‘.’ 0.1 ‘ ’ 1

(Dispersion parameter for binomial family taken to be 1)

Null deviance: 260614 on 191983 degrees of freedom

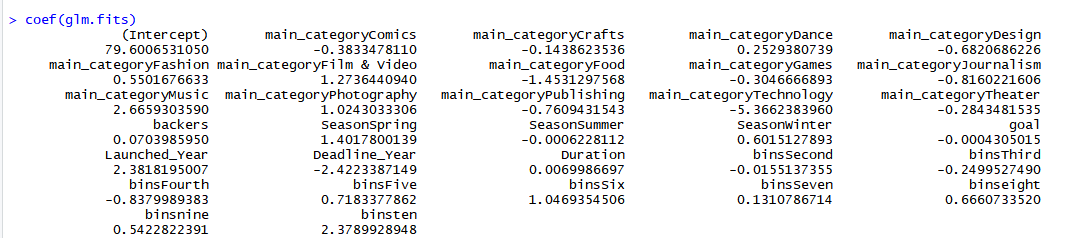
Residual deviance: 70787 on 191952 degrees of freedom

(2421 observations deleted due to missingness)

AIC: 70851

Number of Fisher Scoring iterations: 13

> coef(glm.fits)



> summary(glm.fits)$coef

Estimate Std. Error z value Pr(>|z|)

(Intercept) 79.6006531050 1.445203e+01 5.50792285 3.630925e-08

main\_categoryComics -0.3833478110 7.970220e-02 -4.80975164 1.511179e-06

main\_categoryCrafts -0.1438623536 6.603809e-02 -2.17847525 2.937067e-02

main\_categoryDance 0.2529380739 9.487178e-02 2.66610445 7.673585e-03

main\_categoryDesign -0.6820686226 7.890583e-02 -8.64408443 5.423844e-18

main\_categoryFashion 0.5501676633 7.677769e-02 7.16572316 7.737700e-13

main\_categoryFilm & Video 1.2736440940 4.910494e-02 25.93718700 2.536561e-148

main\_categoryFood -1.4531297568 6.061761e-02 -23.97207091 5.440122e-127

main\_categoryGames -0.3046666893 6.747843e-02 -4.51502319 6.330984e-06

main\_categoryJournalism -0.8160221606 1.203916e-01 -6.77806573 1.217954e-11

main\_categoryMusic 2.6659303590 4.629516e-02 57.58550491 0.000000e+00

main\_categoryPhotography 1.0243033306 7.429134e-02 13.78765530 3.024306e-43

main\_categoryPublishing -0.7609431543 4.771320e-02 -15.94827450 2.928777e-57

main\_categoryTechnology -5.3662383960 1.781552e-01 -30.12113964 2.562003e-199

main\_categoryTheater -0.2843481535 6.012935e-02 -4.72894107 2.256939e-06

backers 0.0703985950 4.612657e-04 152.62049856 0.000000e+00

SeasonSpring 1.4017800139 3.332200e-02 42.06770302 0.000000e+00

SeasonSummer -0.0006228112 3.290045e-02 -0.01893017 9.848968e-01

SeasonWinter 0.6015127893 3.761723e-02 15.99035474 1.491791e-57

goal -0.0004305015 2.806591e-06 -153.38945648 0.000000e+00

Launched\_Year 2.3818195007 4.862940e-02 48.97900655 0.000000e+00

Deadline\_Year -2.4223387149 4.849753e-02 -49.94767551 0.000000e+00

Duration 0.0069986697 9.381236e-04 7.46028566 8.633510e-14

binsSecond -0.0155137355 4.205913e-02 -0.36885537 7.122355e-01

binsThird -0.2499527490 4.269534e-02 -5.85433356 4.789266e-09

binsFourth -0.8379989383 4.501069e-02 -18.61777738 2.305879e-77

binsFive 0.7183377862 4.382876e-02 16.38964392 2.267691e-60

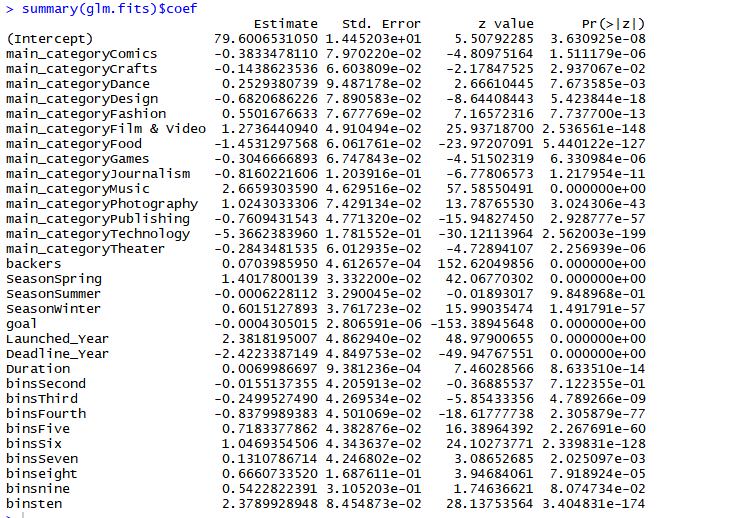
binsSix 1.0469354506 4.343637e-02 24.10273771 2.339831e-128

binsSeven 0.1310786714 4.246802e-02 3.08652685 2.025097e-03

binseight 0.6660733520 1.687611e-01 3.94684061 7.918924e-05

binsnine 0.5422822391 3.105203e-01 1.74636621 8.074734e-02

binsten 2.3789928948 8.454873e-02 28.13753564 3.404831e-174



> glm.probs <-predict(glm.fits,test,type='response')

> glm.pred <- glm.probs

> glm.pred[glm.probs>.5] <- "successful"

> glm.pred[glm.probs<=.5]<- "failed"

> table(glm.pred,test$state)

glm.pred failed successful

failed 3067 534

successful 409 1990

**KNN CODE-**

##DATA NORMALIZATION

> data\_norm<- function(x) {((x-min(x))/(max(x)-min(x)))} #normalization

> norm\_kick<-as.data.frame(lapply(final\_kick[-2],data\_norm))

> final\_binddata<-cbind(final\_kick[2],norm\_kick)

> trainDF<-final\_binddata[1:14000,] #70%

> testDF<- final\_binddata[14001:20000,] #30%

> #KNN

> library(class)

> start.time<-Sys.time()

#KNN LOOP

> TP=rep(0,80)

> FP=rep(0,80)

> TN=rep(0,80)

> FN=rep(0,80)

> for (i in 1:80){

+ prediction\_2<-knn(trainDF[-1],testDF[-1],final\_binddata[1:14000,1],k=i)

+ TP[i]=table(prediction\_2,final\_binddata[14001:20000,1])[1,1]

+ TN[i]=table(prediction\_2,final\_binddata[14001:20000,1])[2,2]

+ FP[i]=table(prediction\_2,final\_binddata[14001:20000,1])[1,2]

+ FN[i]=table(prediction\_2,final\_binddata[14001:20000,1])[1,2]

+ }

> stop.time<- Sys.time()

> total.knn.tuningtime<-print(stop.time-start.time)

Time difference of 6.772924 mins

> #metrics

> accuracytest<-((TP+TN)/(TP+TN+FP+FN))

> sensitivity\_test<-(TP/(TP+FN))

> specificity<-(TN/(TN+FP))

> #view metrics

> accuracytest

> #view metrics

> accuracytest

[1] 0.5689282 0.5678275 0.5636246 0.5665695 0.5604781 0.5658716 0.5653414 0.5654250 0.5685407 0.5684044 0.5687510 0.5640138

[13] 0.5646322 0.5672881 0.5623544 0.5602748 0.5590649 0.5619462 0.5646216 0.5594645 0.5591799 0.5566579 0.5611801 0.5664596

[25] 0.5622677 0.5568899 0.5545024 0.5568826 0.5585764 0.5621845 0.5611247 0.5596330 0.5551504 0.5569697 0.5578437 0.5585914

[37] 0.5589883 0.5568699 0.5618643 0.5548173 0.5500831 0.5486205 0.5477841 0.5516669 0.5497587 0.5514639 0.5526038 0.5499246

[49] 0.5490580 0.5495414 0.5474518 0.5459024 0.5472488 0.5467025 0.5469844 0.5449547 0.5447130 0.5435169 0.5445398 0.5444084

[61] 0.5425626 0.5411765 0.5416299 0.5420162 0.5424376 0.5403617 0.5396337 0.5392732 0.5407820 0.5402198 0.5381467 0.5387087

[73] 0.5371780 0.5376737 0.5401929 0.5394718 0.5418978 0.5409502 0.5409502 0.5393798

> sensitivity\_test

[1] 0.6358772 0.6362367 0.6382693 0.6409018 0.6396655 0.6430640 0.6450194 0.6439750 0.6483007 0.6481195 0.6490643 0.6455243

[13] 0.6471334 0.6490470 0.6469557 0.6440849 0.6449763 0.6464241 0.6482134 0.6441147 0.6443609 0.6427679 0.6460421 0.6503006

[25] 0.6474551 0.6444280 0.6440264 0.6456037 0.6474750 0.6500367 0.6494141 0.6480938 0.6458636 0.6478805 0.6487007 0.6487923

[37] 0.6495788 0.6476122 0.6513651 0.6468615 0.6430113 0.6422939 0.6416627 0.6445826 0.6431644 0.6443274 0.6451999 0.6432329

[49] 0.6427036 0.6435879 0.6431770 0.6422018 0.6429245 0.6429243 0.6435435 0.6423733 0.6426077 0.6420613 0.6429234 0.6434180

[61] 0.6423307 0.6415441 0.6418391 0.6420520 0.6428244 0.6409373 0.6410784 0.6407678 0.6420908 0.6415353 0.6404188 0.6409732

[73] 0.6393704 0.6398450 0.6420118 0.6417707 0.6435711 0.6431808 0.6431808 0.6421624

> specificity

[1] 0.4718137 0.4677288 0.4501634 0.4534314 0.4366830 0.4460784 0.4395425 0.4424020 0.4419935 0.4419935 0.4407680 0.4338235

[13] 0.4317810 0.4358660 0.4244281 0.4248366 0.4183007 0.4244281 0.4289216 0.4219771 0.4203431 0.4158497 0.4227941 0.4297386

[25] 0.4227941 0.4121732 0.4048203 0.4089052 0.4097222 0.4154412 0.4133987 0.4117647 0.4019608 0.4027778 0.4035948 0.4060458

[37] 0.4052288 0.4031863 0.4105392 0.3978758 0.3917484 0.3884804 0.3872549 0.3929739 0.3901144 0.3929739 0.3946078 0.3905229

[49] 0.3888889 0.3880719 0.3815359 0.3786765 0.3815359 0.3794935 0.3786765 0.3745915 0.3729575 0.3700980 0.3713235 0.3692810

[61] 0.3656046 0.3627451 0.3635621 0.3643791 0.3635621 0.3615196 0.3582516 0.3578431 0.3594771 0.3590686 0.3545752 0.3549837

[73] 0.3541667 0.3545752 0.3574346 0.3553922 0.3590686 0.3566176 0.3566176 0.3537582

KNN CROSS VALIDATION

> library(caret)

> set.seed(42)

> start.time<-Sys.time()

> trControl <- trainControl(method = "repeatedcv",

+ number = 10)

> set.seed(2)

> fit <- train(state ~ .,

+ data = final\_binddata,

+ method = "knn",

+ tuneGrid = expand.grid(k = 70:80),

+ trControl = trControl,

+ metric = "Specificity"

+ )

> fit

k-Nearest Neighbors

20000 samples

38 predictor

2 classes: 'failed', 'successful'

No pre-processing

Resampling: Cross-Validated (10 fold, repeated 1 times)

Summary of sample sizes: 17999, 17999, 18000, 18000, 18000, 17999, ...

Resampling results across tuning parameters:

k Accuracy Kappa

70 0.6151010 0.1657505

71 0.6144006 0.1639236

72 0.6139508 0.1627879

73 0.6144007 0.1632637

74 0.6147507 0.1635595

75 0.6146511 0.1629551

76 0.6150505 0.1640697

77 0.6138503 0.1611800

78 0.6138004 0.1607120

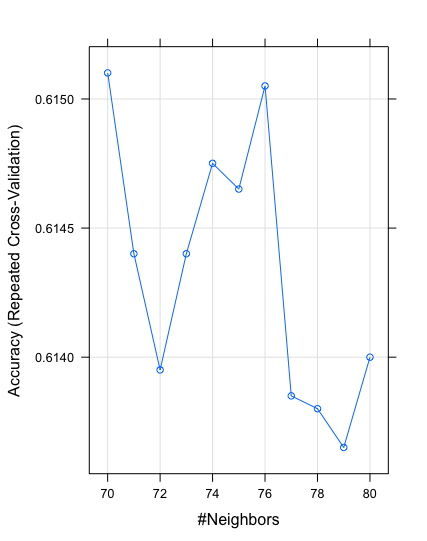
79 0.6136503 0.1597471

80 0.6140000 0.1600700

Accuracy was used to select the optimal model using the largest value.

The final value used for the model was k = 70.

> plot(fit)



> pred<-predict(fit, newdata = final\_binddata)

> confusionMatrix(pred,final\_binddata$state)

Confusion Matrix and Statistics

Reference

Prediction failed successful

failed 9391 5104

successful 2273 3232

Accuracy : 0.6312

95% CI : (0.6244, 0.6378)

No Information Rate : 0.5832

P-Value [Acc > NIR] : < 2.2e-16

Kappa : 0.2027

Mcnemar's Test P-Value : < 2.2e-16

Sensitivity : 0.8051

Specificity : 0.3877

Pos Pred Value : 0.6479

Neg Pred Value : 0.5871

Prevalence : 0.5832

Detection Rate : 0.4696

**LDA CODE-**

> getwd()

[1] "/Users/muskanjindal"

> Data1 <- read.csv("/Users/muskanjindal/Desktop/kickstarter-projects/proj.csv")

> head(Data1)

name main\_category deadline goal launched state

1 Acting Out Yoga Presents: Anna in Paris Publishing 7/2/12 23:08 1500 6/2/12 23:08 failed

2 Auto Icon Screen Prints Design 3/18/15 1:00 1500 2/12/15 19:20 successful

3 Peter Squires' New 7" Record - Recorded by Steve Albini! Music 2/1/16 3:00 500 1/5/16 20:40 successful

4 Much Ado About Nothing Theater 4/30/12 22:00 6000 3/29/12 15:08 failed

5 Bacon Food 9/9/14 21:18 23 7/11/14 21:18 failed

6 MARLEY WAS DEAD Publishing 8/1/13 19:00 4000 7/1/13 19:00 successful

backers .data\_Film...Video .data\_Music .data\_Food .data\_Crafts .data\_Games .data\_Design .data\_Comics .data\_Publishing

1 0 0 0 0 0 0 0 0 1

2 971 0 0 0 0 0 1 0 0

3 31 0 1 0 0 0 0 0 0

4 9 0 0 0 0 0 0 0 0

5 0 0 0 1 0 0 0 0 0

6 99 0 0 0 0 0 0 0 1

.data\_Fashion .data\_Theater .data\_Art .data\_Photography .data\_Technology .data\_Dance .data\_Journalism Season

1 0 0 0 0 0 0 0 Summer

2 0 0 0 0 0 0 0 Winter

3 0 0 0 0 0 0 0 Winter

4 0 1 0 0 0 0 0 Spring

5 0 0 0 0 0 0 0 Summer

6 0 0 0 0 0 0 0 Summer

Prj\_Name\_Length Duration Launched\_Year Deadline\_Year

1 39 30 2012 2012

2 23 34 2015 2015

3 56 27 2016 2016

4 22 32 2012 2012

5 5 60 2014 2014

6 15 31 2013 2013

> num\_columns <- c('Prj\_Name\_Length')

> Data1[num\_columns] <- sapply(Data1[num\_columns], as.numeric)

> Prj\_Name\_Length<-Data1$Prj\_Name\_Length

> Prj\_Name\_Length

[2,] 16

[3,] 52

[4,] 15

[5,] 45

[6,] 7

[7,] 54

[8,] 54

[9,] 20

[10,] 55

#As the result set is huge, we have shown only specific rows.

> cut(Prj\_Name\_Length,10)

[1] (26.2,34.6] (9.4,17.8] (51.4,59.8] (9.4,17.8] (43,51.4] (0.916,9.4] (51.4,59.8] (51.4,59.8] (17.8,26.2]

[10] (51.4,59.8] (0.916,9.4] (51.4,59.8] (43,51.4] (0.916,9.4] (9.4,17.8] (0.916,9.4] (17.8,26.2] (9.4,17.8]

[19] (51.4,59.8] (34.6,43] (17.8,26.2] (9.4,17.8] (43,51.4] (43,51.4] (34.6,43] (17.8,26.2] (43,51.4]

[28] (0.916,9.4] (51.4,59.8] (34.6,43] (34.6,43] (34.6,43] (0.916,9.4] (17.8,26.2] (26.2,34.6] (51.4,59.8]

[37] (9.4,17.8] (26.2,34.6] (43,51.4] (17.8,26.2] (0.916,9.4] (51.4,59.8] (9.4,17.8] (26.2,34.6] (51.4,59.8]

[46] (17.8,26.2] (34.6,43] (51.4,59.8] (51.4,59.8] (0.916,9.4] (0.916,9.4] (0.916,9.4] (34.6,43] (34.6,43]

[55] (0.916,9.4] (43,51.4] (43,51.4] (34.6,43] (17.8,26.2] (43,51.4] (51.4,59.8] (17.8,26.2] (17.8,26.2]

[64] (0.916,9.4] (0.916,9.4] (0.916,9.4] (9.4,17.8] (17.8,26.2] (9.4,17.8] (17.8,26.2] (0.916,9.4] (0.916,9.4]

[73] (34.6,43] (17.8,26.2] (26.2,34.6] (34.6,43] (34.6,43] (34.6,43] (17.8,26.2] (43,51.4] (0.916,9.4]

[82] (43,51.4] (51.4,59.8] (34.6,43] (43,51.4] (0.916,9.4] (0.916,9.4] (34.6,43] (26.2,34.6] (26.2,34.6]

[91] (43,51.4] (34.6,43] (26.2,34.6] (51.4,59.8] (51.4,59.8] (9.4,17.8] (17.8,26.2] (34.6,43] (26.2,34.6]

[100] (34.6,43] (34.6,43] (43,51.4] (26.2,34.6] (26.2,34.6] (43,51.4] (26.2,34.6] (17.8,26.2] (26.2,34.6]

[109] (17.8,26.2] (51.4,59.8] (51.4,59.8] (0.916,9.4] (51.4,59.8] (9.4,17.8] (26.2,34.6] (43,51.4] (17.8,26.2]

[118] (26.2,34.6] (17.8,26.2] (17.8,26.2] (17.8,26.2] (51.4,59.8] (0.916,9.4] (17.8,26.2] (34.6,43] (51.4,59.8]

[127] (17.8,26.2] (17.8,26.2] (9.4,17.8] (17.8,26.2] (34.6,43] (34.6,43] (43,51.4] (51.4,59.8] (43,51.4]

[136] (26.2,34.6] (26.2,34.6] (34.6,43] (34.6,43] (59.8,68.2] (9.4,17.8] (26.2,34.6] (9.4,17.8] (9.4,17.8]

[145] (26.2,34.6] (26.2,34.6] (9.4,17.8] (0.916,9.4] (26.2,34.6] (0.916,9.4] (0.916,9.4] (34.6,43] (0.916,9.4]

[154] (51.4,59.8] (51.4,59.8] (26.2,34.6] (34.6,43] (17.8,26.2] (34.6,43] (17.8,26.2] (26.2,34.6] (43,51.4]

[163] (0.916,9.4] (51.4,59.8] (9.4,17.8] (0.916,9.4] (0.916,9.4] (26.2,34.6] (17.8,26.2] (17.8,26.2] (0.916,9.4]

[172] (26.2,34.6] (0.916,9.4] (9.4,17.8] (9.4,17.8] (34.6,43] (26.2,34.6] (51.4,59.8] (34.6,43] (0.916,9.4]

[181] (9.4,17.8] (59.8,68.2] (9.4,17.8] (17.8,26.2] (51.4,59.8] (17.8,26.2] (34.6,43] (26.2,34.6] (9.4,17.8]

[190] (51.4,59.8] (26.2,34.6] (0.916,9.4] (34.6,43] (34.6,43] (0.916,9.4] (43,51.4] (9.4,17.8] (9.4,17.8]

[199] (59.8,68.2] (0.916,9.4] (51.4,59.8] (51.4,59.8] (17.8,26.2] (0.916,9.4] (17.8,26.2] (34.6,43] (43,51.4]

[208] (17.8,26.2] (17.8,26.2] (0.916,9.4] (26.2,34.6] (9.4,17.8] (9.4,17.8] (26.2,34.6] (17.8,26.2] (34.6,43]

[217] (26.2,34.6] (17.8,26.2] (51.4,59.8] (43,51.4] (34.6,43] (0.916,9.4] (34.6,43] (34.6,43] (51.4,59.8]

[226] (26.2,34.6] (9.4,17.8] (17.8,26.2] (17.8,26.2] (9.4,17.8] (43,51.4] (51.4,59.8] (0.916,9.4] (0.916,9.4]

[235] (0.916,9.4] (34.6,43] (26.2,34.6] (17.8,26.2] (34.6,43] (0.916,9.4] (0.916,9.4] (34.6,43] (43,51.4]

[244] (9.4,17.8] (34.6,43] (43,51.4] (34.6,43] (34.6,43] (34.6,43] (76.6,85.1] (26.2,34.6] (17.8,26.2]

[253] (9.4,17.8] (17.8,26.2] (43,51.4] (34.6,43] (34.6,43] (9.4,17.8] (43,51.4] (51.4,59.8] (76.6,85.1]

[262] (17.8,26.2] (0.916,9.4] (34.6,43] (34.6,43] (9.4,17.8] (17.8,26.2] (17.8,26.2] (51.4,59.8] (9.4,17.8]

[271] (0.916,9.4] (9.4,17.8] (0.916,9.4] (51.4,59.8] (17.8,26.2] (17.8,26.2] (43,51.4] (51.4,59.8] (26.2,34.6]

[280] (51.4,59.8] (0.916,9.4] (34.6,43] (0.916,9.4] (17.8,26.2] (17.8,26.2] (26.2,34.6] (51.4,59.8] (43,51.4]

[289] (17.8,26.2] (0.916,9.4] (43,51.4] (26.2,34.6] (34.6,43] (17.8,26.2] (0.916,9.4] (51.4,59.8] (17.8,26.2]

[298] (51.4,59.8] (51.4,59.8] (26.2,34.6] (26.2,34.6] (9.4,17.8] (26.2,34.6] (9.4,17.8] (9.4,17.8] (26.2,34.6]

[307] (43,51.4] (51.4,59.8] (43,51.4] (34.6,43] (17.8,26.2] (26.2,34.6] (17.8,26.2] (26.2,34.6] (26.2,34.6]

[316] (43,51.4] (51.4,59.8] (17.8,26.2] (0.916,9.4] (17.8,26.2] (17.8,26.2] (26.2,34.6] (43,51.4] (26.2,34.6]

[325] (43,51.4] (17.8,26.2] (17.8,26.2] (34.6,43] (76.6,85.1] (17.8,26.2] (0.916,9.4] (9.4,17.8] (34.6,43]

[334] (26.2,34.6] (43,51.4] (9.4,17.8] (9.4,17.8] (26.2,34.6] (26.2,34.6] (34.6,43] (51.4,59.8] (9.4,17.8]

[343] (34.6,43] (59.8,68.2] (17.8,26.2] (0.916,9.4] (43,51.4] (17.8,26.2] (9.4,17.8] (26.2,34.6] (17.8,26.2]

[352] (0.916,9.4] (17.8,26.2] (17.8,26.2] (51.4,59.8] (9.4,17.8] (0.916,9.4] (26.2,34.6] (26.2,34.6] (34.6,43]

[361] (0.916,9.4] (43,51.4] (0.916,9.4] (43,51.4] (43,51.4] (43,51.4] (0.916,9.4] (0.916,9.4] (17.8,26.2]

[370] (17.8,26.2] (51.4,59.8] (43,51.4] (17.8,26.2] (0.916,9.4] (51.4,59.8] (9.4,17.8] (34.6,43] (43,51.4]

[379] (17.8,26.2] (0.916,9.4] (51.4,59.8] (26.2,34.6] (51.4,59.8] (9.4,17.8] (51.4,59.8] (34.6,43] (9.4,17.8]

[388] (17.8,26.2] (17.8,26.2] (9.4,17.8] (34.6,43] (9.4,17.8] (43,51.4] (0.916,9.4] (51.4,59.8] (51.4,59.8]

[397] (0.916,9.4] (26.2,34.6] (17.8,26.2] (34.6,43] (51.4,59.8] (51.4,59.8] (9.4,17.8] (0.916,9.4] (43,51.4]

[406] (17.8,26.2] (17.8,26.2] (76.6,85.1] (68.2,76.6] (9.4,17.8] (26.2,34.6] (17.8,26.2] (34.6,43] (43,51.4]

[415] (51.4,59.8] (26.2,34.6] (34.6,43] (0.916,9.4] (9.4,17.8] (34.6,43] (34.6,43] (17.8,26.2] (51.4,59.8]

[424] (34.6,43] (9.4,17.8] (43,51.4] (43,51.4] (51.4,59.8] (43,51.4] (0.916,9.4] (51.4,59.8] (34.6,43]

[433] (51.4,59.8] (43,51.4] (34.6,43] (43,51.4] (9.4,17.8] (9.4,17.8] (9.4,17.8] (0.916,9.4] (9.4,17.8]

[442] (26.2,34.6] (26.2,34.6] (9.4,17.8] (43,51.4] (0.916,9.4] (9.4,17.8] (26.2,34.6] (17.8,26.2] (17.8,26.2]

[451] (17.8,26.2] (17.8,26.2] (34.6,43] (43,51.4] (9.4,17.8] (0.916,9.4] (26.2,34.6] (43,51.4] (51.4,59.8]

[460] (9.4,17.8] (51.4,59.8] (0.916,9.4] (17.8,26.2] (34.6,43] (51.4,59.8] (9.4,17.8] (17.8,26.2] (0.916,9.4]

[469] (76.6,85.1] (9.4,17.8] (43,51.4] (9.4,17.8] (51.4,59.8] (17.8,26.2] (26.2,34.6] (68.2,76.6] (17.8,26.2]

[478] (43,51.4] (9.4,17.8] (9.4,17.8] (51.4,59.8] (0.916,9.4] (9.4,17.8] (43,51.4] (26.2,34.6] (76.6,85.1]

[487] (51.4,59.8] (0.916,9.4] (51.4,59.8] (0.916,9.4] (9.4,17.8] (0.916,9.4] (43,51.4] (9.4,17.8] (9.4,17.8]

[496] (0.916,9.4] (51.4,59.8] (51.4,59.8] (17.8,26.2] (17.8,26.2] (0.916,9.4] (17.8,26.2] (26.2,34.6] (43,51.4]

[505] (43,51.4] (17.8,26.2] (76.6,85.1] (51.4,59.8] (51.4,59.8] (17.8,26.2] (9.4,17.8] (17.8,26.2] (0.916,9.4]

[514] (9.4,17.8] (43,51.4] (34.6,43] (43,51.4] (0.916,9.4] (26.2,34.6] (17.8,26.2] (43,51.4] (43,51.4]

[523] (51.4,59.8] (9.4,17.8] (26.2,34.6] (43,51.4] (34.6,43] (34.6,43] (26.2,34.6] (0.916,9.4] (26.2,34.6]

[532] (9.4,17.8] (26.2,34.6] (9.4,17.8] (17.8,26.2] (9.4,17.8] (43,51.4] (59.8,68.2] (51.4,59.8] (51.4,59.8]

[541] (26.2,34.6] (26.2,34.6] (0.916,9.4] (17.8,26.2] (0.916,9.4] (17.8,26.2] (34.6,43] (51.4,59.8] (26.2,34.6]

[550] (51.4,59.8] (26.2,34.6] (34.6,43] (34.6,43] (26.2,34.6] (9.4,17.8] (9.4,17.8] (34.6,43] (9.4,17.8]

[559] (43,51.4] (9.4,17.8] (9.4,17.8] (43,51.4] (0.916,9.4] (0.916,9.4] (34.6,43] (34.6,43] (17.8,26.2]

[568] (17.8,26.2] (43,51.4] (51.4,59.8] (17.8,26.2] (43,51.4] (51.4,59.8] (26.2,34.6] (17.8,26.2] (9.4,17.8]

[577] (0.916,9.4] (26.2,34.6] (43,51.4] (0.916,9.4] (51.4,59.8] (17.8,26.2] (0.916,9.4] (17.8,26.2] (17.8,26.2]

[586] (51.4,59.8] (17.8,26.2] (43,51.4] (43,51.4] (9.4,17.8] (17.8,26.2] (34.6,43] (26.2,34.6] (26.2,34.6]

[595] (34.6,43] (51.4,59.8] (0.916,9.4] (34.6,43] (0.916,9.4] (17.8,26.2] (34.6,43] (43,51.4] (26.2,34.6]

[604] (51.4,59.8] (34.6,43] (17.8,26.2] (26.2,34.6] (34.6,43] (34.6,43] (34.6,43] (9.4,17.8] (0.916,9.4]

[613] (17.8,26.2] (9.4,17.8] (43,51.4] (9.4,17.8] (17.8,26.2] (51.4,59.8] (9.4,17.8] (34.6,43] (0.916,9.4]

[622] (0.916,9.4] (34.6,43] (51.4,59.8] (0.916,9.4] (17.8,26.2] (17.8,26.2] (43,51.4] (51.4,59.8] (17.8,26.2]

[631] (17.8,26.2] (26.2,34.6] (9.4,17.8] (43,51.4] (51.4,59.8] (0.916,9.4] (17.8,26.2] (43,51.4] (0.916,9.4]

[640] (51.4,59.8] (9.4,17.8] (0.916,9.4] (43,51.4] (34.6,43] (9.4,17.8] (17.8,26.2] (9.4,17.8] (43,51.4]

[649] (26.2,34.6] (0.916,9.4] (17.8,26.2] (34.6,43] (51.4,59.8] (17.8,26.2] (43,51.4] (0.916,9.4] (51.4,59.8]

[658] (17.8,26.2] (17.8,26.2] (51.4,59.8] (51.4,59.8] (43,51.4] (17.8,26.2] (43,51.4] (26.2,34.6] (17.8,26.2]

[667] (59.8,68.2] (17.8,26.2] (43,51.4] (9.4,17.8] (9.4,17.8] (34.6,43] (0.916,9.4] (17.8,26.2] (43,51.4]

[676] (51.4,59.8] (17.8,26.2] (9.4,17.8] (0.916,9.4] (9.4,17.8] (0.916,9.4] (9.4,17.8] (43,51.4] (76.6,85.1]

[685] (0.916,9.4] (17.8,26.2] (43,51.4] (34.6,43] (9.4,17.8] (43,51.4] (0.916,9.4] (17.8,26.2] (34.6,43]

[694] (34.6,43] (9.4,17.8] (51.4,59.8] (43,51.4] (9.4,17.8] (26.2,34.6] (17.8,26.2] (9.4,17.8] (34.6,43]

[703] (9.4,17.8] (17.8,26.2] (9.4,17.8] (43,51.4] (43,51.4] (17.8,26.2] (43,51.4] (51.4,59.8] (34.6,43]

[712] (34.6,43] (0.916,9.4] (43,51.4] (34.6,43] (0.916,9.4] (17.8,26.2] (0.916,9.4] (34.6,43] (76.6,85.1]

[721] (51.4,59.8] (17.8,26.2] (9.4,17.8] (17.8,26.2] (43,51.4] (9.4,17.8] (34.6,43] (34.6,43] (0.916,9.4]

[730] (34.6,43] (51.4,59.8] (0.916,9.4] (34.6,43] (68.2,76.6] (0.916,9.4] (9.4,17.8] (34.6,43] (0.916,9.4]

[739] (51.4,59.8] (34.6,43] (26.2,34.6] (0.916,9.4] (43,51.4] (34.6,43] (34.6,43] (26.2,34.6] (76.6,85.1]

[748] (34.6,43] (51.4,59.8] (34.6,43] (26.2,34.6] (9.4,17.8] (26.2,34.6] (17.8,26.2] (0.916,9.4] (51.4,59.8]

[757] (9.4,17.8] (0.916,9.4] (51.4,59.8] (0.916,9.4] (0.916,9.4] (9.4,17.8] (51.4,59.8] (0.916,9.4] (9.4,17.8]

[766] (34.6,43] (68.2,76.6] (9.4,17.8] (9.4,17.8] (9.4,17.8] (17.8,26.2] (34.6,43] (34.6,43] (51.4,59.8]

[775] (76.6,85.1] (43,51.4] (0.916,9.4] (9.4,17.8] (0.916,9.4] (17.8,26.2] (0.916,9.4] (17.8,26.2] (34.6,43]

[784] (0.916,9.4] (43,51.4] (0.916,9.4] (51.4,59.8] (34.6,43] (43,51.4] (43,51.4] (9.4,17.8] (0.916,9.4]

[793] (17.8,26.2] (9.4,17.8] (26.2,34.6] (51.4,59.8] (34.6,43] (9.4,17.8] (51.4,59.8] (34.6,43] (34.6,43]

[802] (9.4,17.8] (34.6,43] (59.8,68.2] (26.2,34.6] (51.4,59.8] (0.916,9.4] (51.4,59.8] (51.4,59.8] (17.8,26.2]

[811] (9.4,17.8] (51.4,59.8] (17.8,26.2] (0.916,9.4] (9.4,17.8] (26.2,34.6] (34.6,43] (26.2,34.6] (26.2,34.6]

[820] (51.4,59.8] (26.2,34.6] (26.2,34.6] (17.8,26.2] (26.2,34.6] (51.4,59.8] (0.916,9.4] (76.6,85.1] (43,51.4]

[829] (51.4,59.8] (17.8,26.2] (17.8,26.2] (34.6,43] (17.8,26.2] (26.2,34.6] (0.916,9.4] (17.8,26.2] (9.4,17.8]

[838] (34.6,43] (34.6,43] (76.6,85.1] (26.2,34.6] (17.8,26.2] (43,51.4] (9.4,17.8] (34.6,43] (9.4,17.8]

[847] (17.8,26.2] (51.4,59.8] (17.8,26.2] (0.916,9.4] (51.4,59.8] (34.6,43] (43,51.4] (0.916,9.4] (0.916,9.4]

[856] (34.6,43] (0.916,9.4] (26.2,34.6] (51.4,59.8] (26.2,34.6] (17.8,26.2] (0.916,9.4] (51.4,59.8] (43,51.4]

[865] (43,51.4] (17.8,26.2] (0.916,9.4] (51.4,59.8] (51.4,59.8] (34.6,43] (26.2,34.6] (17.8,26.2] (9.4,17.8]

[874] (26.2,34.6] (0.916,9.4] (43,51.4] (9.4,17.8] (51.4,59.8] (17.8,26.2] (26.2,34.6] (17.8,26.2] (9.4,17.8]

[883] (9.4,17.8] (43,51.4] (9.4,17.8] (17.8,26.2] (17.8,26.2] (9.4,17.8] (0.916,9.4] (17.8,26.2] (17.8,26.2]

[892] (0.916,9.4] (26.2,34.6] (9.4,17.8] (26.2,34.6] (34.6,43] (34.6,43] (17.8,26.2] (9.4,17.8] (0.916,9.4]

[901] (43,51.4] (9.4,17.8] (43,51.4] (9.4,17.8] (34.6,43] (9.4,17.8] (43,51.4] (51.4,59.8] (34.6,43]

[910] (59.8,68.2] (34.6,43] (43,51.4] (43,51.4] (51.4,59.8] (34.6,43] (34.6,43] (51.4,59.8] (51.4,59.8]

[919] (34.6,43] (34.6,43] (34.6,43] (0.916,9.4] (17.8,26.2] (0.916,9.4] (43,51.4] (34.6,43] (17.8,26.2]

[928] (9.4,17.8] (51.4,59.8] (0.916,9.4] (17.8,26.2] (26.2,34.6] (0.916,9.4] (76.6,85.1] (43,51.4] (26.2,34.6]

[937] (0.916,9.4] (51.4,59.8] (0.916,9.4] (34.6,43] (0.916,9.4] (34.6,43] (51.4,59.8] (17.8,26.2] (9.4,17.8]

[946] (17.8,26.2] (17.8,26.2] (26.2,34.6] (0.916,9.4] (26.2,34.6] (26.2,34.6] (26.2,34.6] (34.6,43] (17.8,26.2]

[955] (43,51.4] (51.4,59.8] (0.916,9.4] (51.4,59.8] (0.916,9.4] (0.916,9.4] (17.8,26.2] (43,51.4] (17.8,26.2]

[964] (17.8,26.2] (43,51.4] (51.4,59.8] (51.4,59.8] (9.4,17.8] (76.6,85.1] (26.2,34.6] (43,51.4] (26.2,34.6]

[973] (34.6,43] (26.2,34.6] (43,51.4] (26.2,34.6] (34.6,43] (26.2,34.6] (51.4,59.8] (9.4,17.8] (0.916,9.4]

[982] (17.8,26.2] (51.4,59.8] (0.916,9.4] (0.916,9.4] (26.2,34.6] (34.6,43] (17.8,26.2] (34.6,43] (51.4,59.8]

[991] (0.916,9.4] (0.916,9.4] (0.916,9.4] (43,51.4] (0.916,9.4] (0.916,9.4] (9.4,17.8] (34.6,43] (34.6,43]

[1000] (26.2,34.6]

[ reached getOption("max.print") -- omitted 19000 entries ]

10 Levels: (0.916,9.4] (9.4,17.8] (17.8,26.2] (26.2,34.6] (34.6,43] (43,51.4] (51.4,59.8] (59.8,68.2] ... (76.6,85.1]

> cut(Prj\_Name\_Length,10,labels=c("First","Second","Third","Fourth","Five","Six","Seven","eight","nine","ten"))

[1] Fourth Second Seven Second Six First Seven Seven Third Seven First Seven Six First Second First

[17] Third Second Seven Five Third Second Six Six Five Third Six First Seven Five Five Five

[33] First Third Fourth Seven Second Fourth Six Third First Seven Second Fourth Seven Third Five Seven

[49] Seven First First First Five Five First Six Six Five Third Six Seven Third Third First

[65] First First Second Third Second Third First First Five Third Fourth Five Five Five Third Six

[81] First Six Seven Five Six First First Five Fourth Fourth Six Five Fourth Seven Seven Second

[97] Third Five Fourth Five Five Six Fourth Fourth Six Fourth Third Fourth Third Seven Seven First

[113] Seven Second Fourth Six Third Fourth Third Third Third Seven First Third Five Seven Third Third

[129] Second Third Five Five Six Seven Six Fourth Fourth Five Five eight Second Fourth Second Second

[145] Fourth Fourth Second First Fourth First First Five First Seven Seven Fourth Five Third Five Third

[161] Fourth Six First Seven Second First First Fourth Third Third First Fourth First Second Second Five

[177] Fourth Seven Five First Second eight Second Third Seven Third Five Fourth Second Seven Fourth First

[193] Five Five First Six Second Second eight First Seven Seven Third First Third Five Six Third

[209] Third First Fourth Second Second Fourth Third Five Fourth Third Seven Six Five First Five Five

[225] Seven Fourth Second Third Third Second Six Seven First First First Five Fourth Third Five First

[241] First Five Six Second Five Six Five Five Five ten Fourth Third Second Third Six Five

[257] Five Second Six Seven ten Third First Five Five Second Third Third Seven Second First Second

[273] First Seven Third Third Six Seven Fourth Seven First Five First Third Third Fourth Seven Six

[289] Third First Six Fourth Five Third First Seven Third Seven Seven Fourth Fourth Second Fourth Second

[305] Second Fourth Six Seven Six Five Third Fourth Third Fourth Fourth Six Seven Third First Third

[321] Third Fourth Six Fourth Six Third Third Five ten Third First Second Five Fourth Six Second

[337] Second Fourth Fourth Five Seven Second Five eight Third First Six Third Second Fourth Third First

[353] Third Third Seven Second First Fourth Fourth Five First Six First Six Six Six First First

[369] Third Third Seven Six Third First Seven Second Five Six Third First Seven Fourth Seven Second

[385] Seven Five Second Third Third Second Five Second Six First Seven Seven First Fourth Third Five

[401] Seven Seven Second First Six Third Third ten nine Second Fourth Third Five Six Seven Fourth

[417] Five First Second Five Five Third Seven Five Second Six Six Seven Six First Seven Five

[433] Seven Six Five Six Second Second Second First Second Fourth Fourth Second Six First Second Fourth

[449] Third Third Third Third Five Six Second First Fourth Six Seven Second Seven First Third Five

[465] Seven Second Third First ten Second Six Second Seven Third Fourth nine Third Six Second Second

[481] Seven First Second Six Fourth ten Seven First Seven First Second First Six Second Second First

[497] Seven Seven Third Third First Third Fourth Six Six Third ten Seven Seven Third Second Third

[513] First Second Six Five Six First Fourth Third Six Six Seven Second Fourth Six Five Five

[529] Fourth First Fourth Second Fourth Second Third Second Six eight Seven Seven Fourth Fourth First Third

[545] First Third Five Seven Fourth Seven Fourth Five Five Fourth Second Second Five Second Six Second

[561] Second Six First First Five Five Third Third Six Seven Third Six Seven Fourth Third Second

[577] First Fourth Six First Seven Third First Third Third Seven Third Six Six Second Third Five

[593] Fourth Fourth Five Seven First Five First Third Five Six Fourth Seven Five Third Fourth Five

[609] Five Five Second First Third Second Six Second Third Seven Second Five First First Five Seven

[625] First Third Third Six Seven Third Third Fourth Second Six Seven First Third Six First Seven

[641] Second First Six Five Second Third Second Six Fourth First Third Five Seven Third Six First

[657] Seven Third Third Seven Seven Six Third Six Fourth Third eight Third Six Second Second Five

[673] First Third Six Seven Third Second First Second First Second Six ten First Third Six Five

[689] Second Six First Third Five Five Second Seven Six Second Fourth Third Second Five Second Third

[705] Second Six Six Third Six Seven Five Five First Six Five First Third First Five ten

[721] Seven Third Second Third Six Second Five Five First Five Seven First Five nine First Second

[737] Five First Seven Five Fourth First Six Five Five Fourth ten Five Seven Five Fourth Second

[753] Fourth Third First Seven Second First Seven First First Second Seven First Second Five nine Second

[769] Second Second Third Five Five Seven ten Six First Second First Third First Third Five First

[785] Six First Seven Five Six Six Second First Third Second Fourth Seven Five Second Seven Five

[801] Five Second Five eight Fourth Seven First Seven Seven Third Second Seven Third First Second Fourth

[817] Five Fourth Fourth Seven Fourth Fourth Third Fourth Seven First ten Six Seven Third Third Five

[833] Third Fourth First Third Second Five Five ten Fourth Third Six Second Five Second Third Seven

[849] Third First Seven Five Six First First Five First Fourth Seven Fourth Third First Seven Six

[865] Six Third First Seven Seven Five Fourth Third Second Fourth First Six Second Seven Third Fourth

[881] Third Second Second Six Second Third Third Second First Third Third First Fourth Second Fourth Five

[897] Five Third Second First Six Second Six Second Five Second Six Seven Five eight Five Six

[913] Six Seven Five Five Seven Seven Five Five Five First Third First Six Five Third Second

[929] Seven First Third Fourth First ten Six Fourth First Seven First Five First Five Seven Third

[945] Second Third Third Fourth First Fourth Fourth Fourth Five Third Six Seven First Seven First First

[961] Third Six Third Third Six Seven Seven Second ten Fourth Six Fourth Five Fourth Six Fourth

[977] Five Fourth Seven Second First Third Seven First First Fourth Five Third Five Seven First First

[993] First Six First First Second Five Five Fourth

[ reached getOption("max.print") -- omitted 19000 entries ]

Levels: First Second Third Fourth Five Six Seven eight nine ten

> Data1$bins<-cut(Prj\_Name\_Length,10,labels=c("First","Second","Third","Fourth","Five","Six","Seven","eight","nine","ten"))

> Data1

name main\_category deadline

1 Acting Out Yoga Presents: Anna in Paris Publishing 7/2/12 23:08

2 Auto Icon Screen Prints Design 3/18/15 1:00

3 Peter Squires' New 7" Record - Recorded by Steve Albini! Music 2/1/16 3:00

4 Much Ado About Nothing Theater 4/30/12 22:00

5 Bacon Food 9/9/14 21:18

6 MARLEY WAS DEAD Publishing 8/1/13 19:00

7 Hip-Hop Script - Rhyming Prose in Poetic Storytelling Form Publishing 10/30/14 21:58

8 They All Fall Down: Book and Music Inspired by True Events Publishing 3/15/13 4:59

9 Power outage survival stove Design 6/7/16 17:07

10 Po-Rum-Bo - A card matching game with an intersecting twist Games 5/29/12 3:00

11 Go F#@D yourself Crafts 11/7/14 0:11

12 Launch Franklin Home Page: The Go To Place for Franklin News Journalism 8/31/12 1:38

13 The First (Ever!) Buffalo Cherry Blossom Festival! Art 12/31/13 21:15

14 Cookie Dunk Dunk Games 4/5/14 16:14

15 RiverRock Music Festival Music 11/3/14 6:00

16 Heroes Everywhere Art 6/6/12 22:31

17 High Voltage Image Making Art 3/26/14 16:33

18 CMYK 4 Poster Series Design 7/19/12 22:35

19 Forensics Forever!- Committed to performing arts excellence! Theater 5/25/15 18:46

20 Nuanced Concrete: Postcards from Apocalypses Art 8/30/13 3:10

21 Never Let the Right One Go Publishing 3/24/12 5:00

22 Joseph & Maka's Studio Dance 3/19/16 21:23

23 Sit Stay Ride: The Story of America's Sidecar Dogs Film & Video 4/4/14 19:08

24 A song to End Slavery. For the FreeWorld 2015 Campaign. Music 10/13/14 7:00

25 Home Grown Books: Fine Art for Beginning Readers Publishing 11/28/11 16:38

26 ParaNova (a neo-noir film) Film & Video 10/23/12 5:59

27 New Album: BRICK AND MORTAR. New Book: HITLESS WONDER. Music 5/11/12 17:47

28 A Hand of Talons Theater 4/13/16 23:02

29 Linknotize, Fund Us and Help Cure Internet Hole Addiction! Games 12/6/15 1:12

30 CAT: A Thruster for Interplanetary CubeSats Technology 8/5/13 23:00

31 These Grey Men: Album and Tour by John Dolmayan Music 8/15/14 6:36

32 LANA - A Short Film Directed By Berman Fenelus Film & Video 2/23/12 17:38

33 UnBorn Hero Film & Video 5/29/15 2:47

34 Destiny's Fate - Round Two! Comics 10/11/12 18:00

35 Learn Game Programming (codeschool.org) Technology 11/25/12 23:10

goal launched state backers .data\_Film...Video .data\_Music .data\_Food .data\_Crafts .data\_Games

1 1500.00 6/2/12 23:08 failed 0 0 0 0 0 0

2 1500.00 2/12/15 19:20 successful 971 0 0 0 0 0

3 500.00 1/5/16 20:40 successful 31 0 1 0 0 0

4 6000.00 3/29/12 15:08 failed 9 0 0 0 0 0

5 23.00 7/11/14 21:18 failed 0 0 0 1 0 0

6 4000.00 7/1/13 19:00 successful 99 0 0 0 0 0

7 2000.00 9/30/14 22:58 failed 1 0 0 0 0 0

8 6000.00 2/6/13 6:07 successful 113 0 0 0 0 0

9 80000.00 4/8/16 17:07 failed 5 0 0 0 0 0

10 10000.00 4/6/12 15:05 failed 33 0 0 0 0 1

11 200.00 10/8/14 0:11 failed 1 0 0 0 1 0

12 10000.00 8/1/12 1:38 failed 13 0 0 0 0 0

13 5000.00 11/26/13 19:56 successful 108 0 0 0 0 0

14 56000.00 2/19/14 16:14 failed 65 0 0 0 0 1

15 25000.00 9/17/14 20:21 failed 5 0 1 0 0 0

16 5000.00 5/7/12 22:31 failed 5 0 0 0 0 0

17 5000.00 2/24/14 17:33 successful 525 0 0 0 0 0

18 750.00 6/4/12 22:35 failed 16 0 0 0 0 0

19 150000.00 4/20/15 18:46 failed 1 0 0 0 0 0

20 307.00 8/1/13 3:10 failed 12 0 0 0 0 0

21 1000.00 3/6/12 19:24 failed 14 0 0 0 0 0

22 7000.00 2/20/16 8:36 failed 37 0 0 0 0 0

23 28000.00 3/5/14 19:08 successful 679 1 0 0 0 0

24 3900.00 9/3/14 5:09 failed 20 0 1 0 0 0

25 7500.00 11/7/11 16:38 successful 80 0 0 0 0 0

26 14500.00 9/28/12 18:21 failed 0 1 0 0 0 0

27 5000.00 3/15/12 2:20 successful 44 0 1 0 0 0

28 3500.00 3/23/16 22:02 successful 57 0 0 0 0 0

29 7500.00 10/7/15 1:12 failed 6 0 0 0 0 1

30 200000.00 7/4/13 11:19 failed 1274 0 0 0 0 0

31 55000.00 6/16/14 6:36 successful 287 0 1 0 0 0

32 10000.00 1/9/12 17:38 successful 153 1 0 0 0 0

33 60000.00 3/30/15 2:47 failed 60 1 0 0 0 0

34 1500.00 9/20/12 1:47 successful 78 0 0 0 0 0

35 700.00 10/26/12 23:10 successful 702 0 0 0 0 0

.data\_Design .data\_Comics .data\_Publishing .data\_Fashion .data\_Theater .data\_Art .data\_Photography .data\_Technology

1 0 0 1 0 0 0 0 0

2 1 0 0 0 0 0 0 0

3 0 0 0 0 0 0 0 0

4 0 0 0 0 1 0 0 0

5 0 0 0 0 0 0 0 0

6 0 0 1 0 0 0 0 0

7 0 0 1 0 0 0 0 0

8 0 0 1 0 0 0 0 0

9 1 0 0 0 0 0 0 0

10 0 0 0 0 0 0 0 0

11 0 0 0 0 0 0 0 0

12 0 0 0 0 0 0 0 0

13 0 0 0 0 0 1 0 0

14 0 0 0 0 0 0 0 0

15 0 0 0 0 0 0 0 0

16 0 0 0 0 0 1 0 0

17 0 0 0 0 0 1 0 0

18 1 0 0 0 0 0 0 0

19 0 0 0 0 1 0 0 0

20 0 0 0 0 0 1 0 0

21 0 0 1 0 0 0 0 0

22 0 0 0 0 0 0 0 0

23 0 0 0 0 0 0 0 0

24 0 0 0 0 0 0 0 0

25 0 0 1 0 0 0 0 0

26 0 0 0 0 0 0 0 0

27 0 0 0 0 0 0 0 0

28 0 0 0 0 1 0 0 0

29 0 0 0 0 0 0 0 0

30 0 0 0 0 0 0 0 1

31 0 0 0 0 0 0 0 0

32 0 0 0 0 0 0 0 0

33 0 0 0 0 0 0 0 0

34 0 1 0 0 0 0 0 0

35 0 0 0 0 0 0 0 1

.data\_Dance .data\_Journalism Season Prj\_Name\_Length Duration Launched\_Year Deadline\_Year bins

1 0 0 Summer 33 30 2012 2012 Fourth

2 0 0 Winter 16 34 2015 2015 Second

3 0 0 Winter 52 27 2016 2016 Seven

4 0 0 Spring 15 32 2012 2012 Second

5 0 0 Summer 45 60 2014 2014 Six

6 0 0 Summer 7 31 2013 2013 First

7 0 0 Fall 54 30 2014 2014 Seven

8 0 0 Winter 54 37 2013 2013 Seven

9 0 0 Spring 20 60 2016 2016 Third

10 0 0 Spring 55 53 2012 2012 Seven

11 0 0 Fall 8 30 2014 2014 First

12 0 1 Summer 57 30 2012 2012 Seven

13 0 0 Fall 46 35 2013 2013 Six

14 0 0 Winter 8 45 2014 2014 First

15 0 0 Fall 17 47 2014 2014 Second

16 0 0 Spring 9 30 2012 2012 First

17 0 0 Winter 18 30 2014 2014 Third

18 0 0 Summer 13 45 2012 2012 Second

19 0 0 Spring 57 35 2015 2015 Seven

20 0 0 Summer 39 29 2013 2013 Five

21 0 0 Spring 19 18 2012 2012 Third

22 1 0 Winter 15 28 2016 2016 Second

23 0 0 Spring 46 30 2014 2014 Six

24 0 0 Fall 51 40 2014 2014 Six

25 0 0 Fall 43 21 2011 2011 Five

26 0 0 Fall 19 25 2012 2012 Third

27 0 0 Spring 50 57 2012 2012 Six

28 0 0 Spring 8 21 2016 2016 First

29 0 0 Fall 54 60 2015 2015 Seven

30 0 0 Summer 38 32 2013 2013 Five

31 0 0 Summer 42 60 2014 2014 Five

32 0 0 Winter 41 45 2012 2012 Five

33 0 0 Spring 3 60 2015 2015 First

34 0 0 Fall 20 21 2012 2012 Third

35 0 0 Fall 33 30 2012 2012 Fourth

[ reached getOption("max.print") -- omitted 19965 rows ]

> summary(Data1)

name main\_category deadline goal launched

#NAME? : 5 Film & Video:3711 6/2/12 5:59 : 6 Min. : 1 3/26/13 20:46: 3

Facade : 2 Music :3229 9/1/10 5:59 : 6 1st Qu.: 2000 8/12/13 22:10: 3

Keys to the City: 2 Publishing :2221 1/1/12 8:59 : 4 Median : 5000 1/10/13 20:46: 2

Music Video : 2 Art :1635 11/1/14 4:59: 4 Mean : 38148 1/14/15 3:01 : 2

My First Film : 2 Games :1486 12/1/14 8:59: 4 3rd Qu.: 15000 1/15/13 16:01: 2

Pangaea : 2 Design :1322 3/1/12 3:00 : 4 Max. :100000000 1/15/15 1:13 : 2

(Other) :19985 (Other) :6396 (Other) :19972 (Other) :19986

state backers .data\_Film...Video .data\_Music .data\_Food .data\_Crafts

failed :11664 Min. : 0.0 Min. :0.0000 Min. :0.0000 Min. :0.0000 Min. :0.0000

successful: 8336 1st Qu.: 2.0 1st Qu.:0.0000 1st Qu.:0.0000 1st Qu.:0.0000 1st Qu.:0.0000

Median : 17.0 Median :0.0000 Median :0.0000 Median :0.0000 Median :0.0000

Mean : 113.2 Mean :0.1855 Mean :0.1615 Mean :0.0656 Mean :0.0232

3rd Qu.: 65.0 3rd Qu.:0.0000 3rd Qu.:0.0000 3rd Qu.:0.0000 3rd Qu.:0.0000

Max. :105857.0 Max. :1.0000 Max. :1.0000 Max. :1.0000 Max. :1.0000

.data\_Games .data\_Design .data\_Comics .data\_Publishing .data\_Fashion .data\_Theater .data\_Art

Min. :0.0000 Min. :0.0000 Min. :0.0000 Min. :0.000 Min. :0.0000 Min. :0.00000 Min. :0.00000

1st Qu.:0.0000 1st Qu.:0.0000 1st Qu.:0.0000 1st Qu.:0.000 1st Qu.:0.0000 1st Qu.:0.00000 1st Qu.:0.00000

Median :0.0000 Median :0.0000 Median :0.0000 Median :0.000 Median :0.0000 Median :0.00000 Median :0.00000

Mean :0.0743 Mean :0.0661 Mean :0.0319 Mean :0.111 Mean :0.0518 Mean :0.03195 Mean :0.08175

3rd Qu.:0.0000 3rd Qu.:0.0000 3rd Qu.:0.0000 3rd Qu.:0.000 3rd Qu.:0.0000 3rd Qu.:0.00000 3rd Qu.:0.00000

Max. :1.0000 Max. :1.0000 Max. :1.0000 Max. :1.000 Max. :1.0000 Max. :1.00000 Max. :1.00000

.data\_Photography .data\_Technology .data\_Dance .data\_Journalism Season Prj\_Name\_Length.Prj\_Name\_Length

Min. :0.00000 Min. :0.0000 Min. :0.00000 Min. :0.00000 Fall :4930 Min. : 1.00000

1st Qu.:0.00000 1st Qu.:0.0000 1st Qu.:0.00000 1st Qu.:0.00000 Spring:5319 1st Qu.:16.00000

Median :0.00000 Median :0.0000 Median :0.00000 Median :0.00000 Summer:5539 Median :29.00000

Mean :0.02845 Mean :0.0627 Mean :0.01265 Mean :0.01155 Winter:4212 Mean :30.87895

3rd Qu.:0.00000 3rd Qu.:0.0000 3rd Qu.:0.00000 3rd Qu.:0.00000 3rd Qu.:46.00000

Max. :1.00000 Max. :1.0000 Max. :1.00000 Max. :1.00000 Max. :85.00000

Duration Launched\_Year Deadline\_Year bins

Min. : 1.0 Min. :2009 Min. :2009 Third :3300

1st Qu.:30.0 1st Qu.:2012 1st Qu.:2012 Five :3066

Median :30.0 Median :2014 Median :2014 Second :2961

Mean :34.5 Mean :2013 Mean :2014 First :2728

3rd Qu.:38.0 3rd Qu.:2015 3rd Qu.:2015 Fourth :2552

Max. :92.0 Max. :2016 Max. :2016 Seven :2397

(Other):2996

> smp\_size <- floor(0.70\*nrow(proj))

> set.seed(123)

> train\_ind <- sample(seq\_len(nrow(Data1)), size=smp\_size)

> train <- Data1[train\_ind, ]

> test <- Data1[-train\_ind, ]

> dim(train)

[1] 14000 28

> dim(test)

[1] 6000 28

> library(MASS)

> lda.fit=lda(state ~ main\_category+goal+Season+Launched\_Year+Duration+Deadline\_Year+bins, train)

> lda.fit

Call:

lda(state ~ main\_category + goal + Season + Launched\_Year + Duration +

Deadline\_Year + bins, data = train)

Prior probabilities of groups:

failed successful

0.5848571 0.4151429

Group means:

main\_categoryComics main\_categoryCrafts main\_categoryDance main\_categoryDesign main\_categoryFashion

failed 0.02296043 0.03004397 0.006717147 0.06924768 0.05959941

successful 0.04129387 0.01428080 0.020474880 0.05970406 0.03940124

main\_categoryFilm & Video main\_categoryFood main\_categoryGames main\_categoryJournalism main\_categoryMusic

failed 0.1836834 0.07694187 0.07034685 0.016243283 0.1308012

successful 0.1866827 0.04886442 0.08224363 0.007226428 0.2088782

main\_categoryPhotography main\_categoryPublishing main\_categoryTechnology main\_categoryTheater goal

failed 0.03297509 0.12652662 0.07840743 0.01831949 50520.798

successful 0.02271163 0.08843772 0.04026153 0.05075705 9337.762

SeasonSpring SeasonSummer SeasonWinter Launched\_Year Duration Deadline\_Year binsSecond binsThird binsFourth

failed 0.2641671 0.2805325 0.2149487 2013.664 35.74145 2013.733 0.1606009 0.1653639 0.1212750

successful 0.2713352 0.2646249 0.2064694 2013.244 32.78527 2013.302 0.1305919 0.1637990 0.1383345

binsFive binsSix binsSeven binseight binsnine binsten

failed 0.1373962 0.1069858 0.1133366 0.009159746 0.002076209 0.02283830

successful 0.1720578 0.1290434 0.1297316 0.008258775 0.002236752 0.01892636

Coefficients of linear discriminants:

LD1

main\_categoryComics 1.001926e+00

main\_categoryCrafts -1.244674e+00

main\_categoryDance 1.700155e+00

main\_categoryDesign -3.788295e-01

main\_categoryFashion -8.358232e-01

main\_categoryFilm & Video -1.688718e-01

main\_categoryFood -8.137964e-01

main\_categoryGames 1.958781e-01

main\_categoryJournalism -1.415591e+00

main\_categoryMusic 5.382244e-01

main\_categoryPhotography -9.493042e-01

main\_categoryPublishing -8.754542e-01

main\_categoryTechnology -1.098039e+00

main\_categoryTheater 1.420326e+00

goal -1.352643e-07

SeasonSpring -1.372865e-02

SeasonSummer -2.104731e-01

SeasonWinter -4.520619e-03

Launched\_Year 5.483242e-02

Duration -3.834316e-02

Deadline\_Year -2.974260e-01

binsSecond 2.905303e-01

binsThird 5.239005e-01

binsFourth 7.625072e-01

binsFive 9.358461e-01

binsSix 9.464679e-01

binsSeven 8.967967e-01

binseight 4.668420e-01

binsnine 3.298359e-02

binsten 3.091376e-01

> lda.pred=predict(lda.fit, Data1)

> names(lda.pred)

[1] "class" "posterior" "x"

> lda.class=lda.pred$class

> table(lda.class, Data1[,6])

lda.class failed successful

failed 9449 5163

successful 2215 3173

> mean(lda.class==Data1[,6])

[1] 0.6311

> sum(lda.pred$posterior[,1]>=.5)

[1] 14612

> sum(lda.pred$posterior[,1]<.5)

[1] 5388

> lda.pred$posterior[1:20,1]

1 2 3 4 5 6 7 8 9 10 11 12

0.6073702 0.6941895 0.4766350 0.3297543 0.7782492 0.7410805 0.6269357 0.6311821 0.8060586 0.5324853 0.7799336 0.6628902

13 14 15 16 17 18 19 20

0.4859957 0.6818374 0.6056855 0.5631569 0.5561951 0.6815137 0.3639249 0.4845823

> lda.class[1:20]

[1] failed failed successful successful failed failed failed failed failed failed

[11] failed failed successful failed failed failed failed failed successful successful

Levels: failed successful

> sum(lda.pred$posterior[,1]>.9)

[1] 11

LDA CROSS VALIDATION

> library(MASS)

> library(dplyr)

> Data1 <- read.csv("/Users/muskanjindal/Desktop/kickstarter-projects/proj.csv")

> head(Data1)

name main\_category deadline goal launched state

1 Acting Out Yoga Presents: Anna in Paris Publishing 7/2/12 23:08 1500 6/2/12 23:08 failed

2 Auto Icon Screen Prints Design 3/18/15 1:00 1500 2/12/15 19:20 successful

3 Peter Squires' New 7" Record - Recorded by Steve Albini! Music 2/1/16 3:00 500 1/5/16 20:40 successful

4 Much Ado About Nothing Theater 4/30/12 22:00 6000 3/29/12 15:08 failed

5 Bacon Food 9/9/14 21:18 23 7/11/14 21:18 failed

6 MARLEY WAS DEAD Publishing 8/1/13 19:00 4000 7/1/13 19:00 successful

backers .data\_Film...Video .data\_Music .data\_Food .data\_Crafts .data\_Games .data\_Design .data\_Comics .data\_Publishing

1 0 0 0 0 0 0 0 0 1

2 971 0 0 0 0 0 1 0 0

3 31 0 1 0 0 0 0 0 0

4 9 0 0 0 0 0 0 0 0

5 0 0 0 1 0 0 0 0 0

6 99 0 0 0 0 0 0 0 1

.data\_Fashion .data\_Theater .data\_Art .data\_Photography .data\_Technology .data\_Dance .data\_Journalism Season

1 0 0 0 0 0 0 0 Summer

2 0 0 0 0 0 0 0 Winter

3 0 0 0 0 0 0 0 Winter

4 0 1 0 0 0 0 0 Spring

5 0 0 0 0 0 0 0 Summer

6 0 0 0 0 0 0 0 Summer

Prj\_Name\_Length Duration Launched\_Year Deadline\_Year

1 39 30 2012 2012

2 23 34 2015 2015

3 56 27 2016 2016

4 22 32 2012 2012

5 5 60 2014 2014

6 15 31 2013 2013

> num\_columns <- c('Prj\_Name\_Length')

> Data1[num\_columns] <- sapply(Data1[num\_columns], as.numeric)

> Prj\_Name\_Length<-Data1$Prj\_Name\_Length

> Prj\_Name\_Length

[2,] 16

[3,] 52

[4,] 15

[5,] 45

[6,] 7

[7,] 54

[8,] 54

[9,] 20

[10,] 55

[ reached getOption("max.print") -- omitted 19000 rows ]

# As the result set is huge, we have shown only specific rows.

> cut(Prj\_Name\_Length,10)

[1] (26.2,34.6] (9.4,17.8] (51.4,59.8] (9.4,17.8] (43,51.4] (0.916,9.4] (51.4,59.8] (51.4,59.8] (17.8,26.2]

[10] (51.4,59.8] (0.916,9.4] (51.4,59.8] (43,51.4] (0.916,9.4] (9.4,17.8] (0.916,9.4] (17.8,26.2] (9.4,17.8]

[19] (51.4,59.8] (34.6,43] (17.8,26.2] (9.4,17.8] (43,51.4] (43,51.4] (34.6,43] (17.8,26.2] (43,51.4]

[28] (0.916,9.4] (51.4,59.8] (34.6,43] (34.6,43] (34.6,43] (0.916,9.4] (17.8,26.2] (26.2,34.6] (51.4,59.8]

[37] (9.4,17.8] (26.2,34.6] (43,51.4] (17.8,26.2] (0.916,9.4] (51.4,59.8] (9.4,17.8] (26.2,34.6] (51.4,59.8]

[46] (17.8,26.2] (34.6,43] (51.4,59.8] (51.4,59.8] (0.916,9.4] (0.916,9.4] (0.916,9.4] (34.6,43] (34.6,43]

[55] (0.916,9.4] (43,51.4] (43,51.4] (34.6,43] (17.8,26.2] (43,51.4] (51.4,59.8] (17.8,26.2] (17.8,26.2]

[64] (0.916,9.4] (0.916,9.4] (0.916,9.4] (9.4,17.8] (17.8,26.2] (9.4,17.8] (17.8,26.2] (0.916,9.4] (0.916,9.4]

[73] (34.6,43] (17.8,26.2] (26.2,34.6] (34.6,43] (34.6,43] (34.6,43] (17.8,26.2] (43,51.4] (0.916,9.4]

[82] (43,51.4] (51.4,59.8] (34.6,43] (43,51.4] (0.916,9.4] (0.916,9.4] (34.6,43] (26.2,34.6] (26.2,34.6]

[91] (43,51.4] (34.6,43] (26.2,34.6] (51.4,59.8] (51.4,59.8] (9.4,17.8] (17.8,26.2] (34.6,43] (26.2,34.6]

[100] (34.6,43] (34.6,43] (43,51.4] (26.2,34.6] (26.2,34.6] (43,51.4] (26.2,34.6] (17.8,26.2] (26.2,34.6]

[109] (17.8,26.2] (51.4,59.8] (51.4,59.8] (0.916,9.4] (51.4,59.8] (9.4,17.8] (26.2,34.6] (43,51.4] (17.8,26.2]

[118] (26.2,34.6] (17.8,26.2] (17.8,26.2] (17.8,26.2] (51.4,59.8] (0.916,9.4] (17.8,26.2] (34.6,43] (51.4,59.8]

[127] (17.8,26.2] (17.8,26.2] (9.4,17.8] (17.8,26.2] (34.6,43] (34.6,43] (43,51.4] (51.4,59.8] (43,51.4]

[136] (26.2,34.6] (26.2,34.6] (34.6,43] (34.6,43] (59.8,68.2] (9.4,17.8] (26.2,34.6] (9.4,17.8] (9.4,17.8]

[145] (26.2,34.6] (26.2,34.6] (9.4,17.8] (0.916,9.4] (26.2,34.6] (0.916,9.4] (0.916,9.4] (34.6,43] (0.916,9.4]

[154] (51.4,59.8] (51.4,59.8] (26.2,34.6] (34.6,43] (17.8,26.2] (34.6,43] (17.8,26.2] (26.2,34.6] (43,51.4]

[163] (0.916,9.4] (51.4,59.8] (9.4,17.8] (0.916,9.4] (0.916,9.4] (26.2,34.6] (17.8,26.2] (17.8,26.2] (0.916,9.4]

[172] (26.2,34.6] (0.916,9.4] (9.4,17.8] (9.4,17.8] (34.6,43] (26.2,34.6] (51.4,59.8] (34.6,43] (0.916,9.4]

[181] (9.4,17.8] (59.8,68.2] (9.4,17.8] (17.8,26.2] (51.4,59.8] (17.8,26.2] (34.6,43] (26.2,34.6] (9.4,17.8]

[190] (51.4,59.8] (26.2,34.6] (0.916,9.4] (34.6,43] (34.6,43] (0.916,9.4] (43,51.4] (9.4,17.8] (9.4,17.8]

[199] (59.8,68.2] (0.916,9.4] (51.4,59.8] (51.4,59.8] (17.8,26.2] (0.916,9.4] (17.8,26.2] (34.6,43] (43,51.4]

[208] (17.8,26.2] (17.8,26.2] (0.916,9.4] (26.2,34.6] (9.4,17.8] (9.4,17.8] (26.2,34.6] (17.8,26.2] (34.6,43]

[217] (26.2,34.6] (17.8,26.2] (51.4,59.8] (43,51.4] (34.6,43] (0.916,9.4] (34.6,43] (34.6,43] (51.4,59.8]

[226] (26.2,34.6] (9.4,17.8] (17.8,26.2] (17.8,26.2] (9.4,17.8] (43,51.4] (51.4,59.8] (0.916,9.4] (0.916,9.4]

[235] (0.916,9.4] (34.6,43] (26.2,34.6] (17.8,26.2] (34.6,43] (0.916,9.4] (0.916,9.4] (34.6,43] (43,51.4]

[244] (9.4,17.8] (34.6,43] (43,51.4] (34.6,43] (34.6,43] (34.6,43] (76.6,85.1] (26.2,34.6] (17.8,26.2]

[253] (9.4,17.8] (17.8,26.2] (43,51.4] (34.6,43] (34.6,43] (9.4,17.8] (43,51.4] (51.4,59.8] (76.6,85.1]

[262] (17.8,26.2] (0.916,9.4] (34.6,43] (34.6,43] (9.4,17.8] (17.8,26.2] (17.8,26.2] (51.4,59.8] (9.4,17.8]

[271] (0.916,9.4] (9.4,17.8] (0.916,9.4] (51.4,59.8] (17.8,26.2] (17.8,26.2] (43,51.4] (51.4,59.8] (26.2,34.6]

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[289] (17.8,26.2] (0.916,9.4] (43,51.4] (26.2,34.6] (34.6,43] (17.8,26.2] (0.916,9.4] (51.4,59.8] (17.8,26.2]

[298] (51.4,59.8] (51.4,59.8] (26.2,34.6] (26.2,34.6] (9.4,17.8] (26.2,34.6] (9.4,17.8] (9.4,17.8] (26.2,34.6]

[307] (43,51.4] (51.4,59.8] (43,51.4] (34.6,43] (17.8,26.2] (26.2,34.6] (17.8,26.2] (26.2,34.6] (26.2,34.6]

[316] (43,51.4] (51.4,59.8] (17.8,26.2] (0.916,9.4] (17.8,26.2] (17.8,26.2] (26.2,34.6] (43,51.4] (26.2,34.6]

[325] (43,51.4] (17.8,26.2] (17.8,26.2] (34.6,43] (76.6,85.1] (17.8,26.2] (0.916,9.4] (9.4,17.8] (34.6,43]

[334] (26.2,34.6] (43,51.4] (9.4,17.8] (9.4,17.8] (26.2,34.6] (26.2,34.6] (34.6,43] (51.4,59.8] (9.4,17.8]

[343] (34.6,43] (59.8,68.2] (17.8,26.2] (0.916,9.4] (43,51.4] (17.8,26.2] (9.4,17.8] (26.2,34.6] (17.8,26.2]

[352] (0.916,9.4] (17.8,26.2] (17.8,26.2] (51.4,59.8] (9.4,17.8] (0.916,9.4] (26.2,34.6] (26.2,34.6] (34.6,43]

[361] (0.916,9.4] (43,51.4] (0.916,9.4] (43,51.4] (43,51.4] (43,51.4] (0.916,9.4] (0.916,9.4] (17.8,26.2]

[370] (17.8,26.2] (51.4,59.8] (43,51.4] (17.8,26.2] (0.916,9.4] (51.4,59.8] (9.4,17.8] (34.6,43] (43,51.4]

[379] (17.8,26.2] (0.916,9.4] (51.4,59.8] (26.2,34.6] (51.4,59.8] (9.4,17.8] (51.4,59.8] (34.6,43] (9.4,17.8]

[388] (17.8,26.2] (17.8,26.2] (9.4,17.8] (34.6,43] (9.4,17.8] (43,51.4] (0.916,9.4] (51.4,59.8] (51.4,59.8]

[397] (0.916,9.4] (26.2,34.6] (17.8,26.2] (34.6,43] (51.4,59.8] (51.4,59.8] (9.4,17.8] (0.916,9.4] (43,51.4]

[406] (17.8,26.2] (17.8,26.2] (76.6,85.1] (68.2,76.6] (9.4,17.8] (26.2,34.6] (17.8,26.2] (34.6,43] (43,51.4]

[415] (51.4,59.8] (26.2,34.6] (34.6,43] (0.916,9.4] (9.4,17.8] (34.6,43] (34.6,43] (17.8,26.2] (51.4,59.8]

[424] (34.6,43] (9.4,17.8] (43,51.4] (43,51.4] (51.4,59.8] (43,51.4] (0.916,9.4] (51.4,59.8] (34.6,43]

[433] (51.4,59.8] (43,51.4] (34.6,43] (43,51.4] (9.4,17.8] (9.4,17.8] (9.4,17.8] (0.916,9.4] (9.4,17.8]

[442] (26.2,34.6] (26.2,34.6] (9.4,17.8] (43,51.4] (0.916,9.4] (9.4,17.8] (26.2,34.6] (17.8,26.2] (17.8,26.2]

[451] (17.8,26.2] (17.8,26.2] (34.6,43] (43,51.4] (9.4,17.8] (0.916,9.4] (26.2,34.6] (43,51.4] (51.4,59.8]

[460] (9.4,17.8] (51.4,59.8] (0.916,9.4] (17.8,26.2] (34.6,43] (51.4,59.8] (9.4,17.8] (17.8,26.2] (0.916,9.4]

[469] (76.6,85.1] (9.4,17.8] (43,51.4] (9.4,17.8] (51.4,59.8] (17.8,26.2] (26.2,34.6] (68.2,76.6] (17.8,26.2]

[478] (43,51.4] (9.4,17.8] (9.4,17.8] (51.4,59.8] (0.916,9.4] (9.4,17.8] (43,51.4] (26.2,34.6] (76.6,85.1]

[487] (51.4,59.8] (0.916,9.4] (51.4,59.8] (0.916,9.4] (9.4,17.8] (0.916,9.4] (43,51.4] (9.4,17.8] (9.4,17.8]

[496] (0.916,9.4] (51.4,59.8] (51.4,59.8] (17.8,26.2] (17.8,26.2] (0.916,9.4] (17.8,26.2] (26.2,34.6] (43,51.4]

[505] (43,51.4] (17.8,26.2] (76.6,85.1] (51.4,59.8] (51.4,59.8] (17.8,26.2] (9.4,17.8] (17.8,26.2] (0.916,9.4]

[514] (9.4,17.8] (43,51.4] (34.6,43] (43,51.4] (0.916,9.4] (26.2,34.6] (17.8,26.2] (43,51.4] (43,51.4]

[523] (51.4,59.8] (9.4,17.8] (26.2,34.6] (43,51.4] (34.6,43] (34.6,43] (26.2,34.6] (0.916,9.4] (26.2,34.6]

[532] (9.4,17.8] (26.2,34.6] (9.4,17.8] (17.8,26.2] (9.4,17.8] (43,51.4] (59.8,68.2] (51.4,59.8] (51.4,59.8]

[541] (26.2,34.6] (26.2,34.6] (0.916,9.4] (17.8,26.2] (0.916,9.4] (17.8,26.2] (34.6,43] (51.4,59.8] (26.2,34.6]

[550] (51.4,59.8] (26.2,34.6] (34.6,43] (34.6,43] (26.2,34.6] (9.4,17.8] (9.4,17.8] (34.6,43] (9.4,17.8]

[559] (43,51.4] (9.4,17.8] (9.4,17.8] (43,51.4] (0.916,9.4] (0.916,9.4] (34.6,43] (34.6,43] (17.8,26.2]

[568] (17.8,26.2] (43,51.4] (51.4,59.8] (17.8,26.2] (43,51.4] (51.4,59.8] (26.2,34.6] (17.8,26.2] (9.4,17.8]

[577] (0.916,9.4] (26.2,34.6] (43,51.4] (0.916,9.4] (51.4,59.8] (17.8,26.2] (0.916,9.4] (17.8,26.2] (17.8,26.2]

[586] (51.4,59.8] (17.8,26.2] (43,51.4] (43,51.4] (9.4,17.8] (17.8,26.2] (34.6,43] (26.2,34.6] (26.2,34.6]

[595] (34.6,43] (51.4,59.8] (0.916,9.4] (34.6,43] (0.916,9.4] (17.8,26.2] (34.6,43] (43,51.4] (26.2,34.6]

[604] (51.4,59.8] (34.6,43] (17.8,26.2] (26.2,34.6] (34.6,43] (34.6,43] (34.6,43] (9.4,17.8] (0.916,9.4]

[613] (17.8,26.2] (9.4,17.8] (43,51.4] (9.4,17.8] (17.8,26.2] (51.4,59.8] (9.4,17.8] (34.6,43] (0.916,9.4]

[622] (0.916,9.4] (34.6,43] (51.4,59.8] (0.916,9.4] (17.8,26.2] (17.8,26.2] (43,51.4] (51.4,59.8] (17.8,26.2]

[631] (17.8,26.2] (26.2,34.6] (9.4,17.8] (43,51.4] (51.4,59.8] (0.916,9.4] (17.8,26.2] (43,51.4] (0.916,9.4]

[640] (51.4,59.8] (9.4,17.8] (0.916,9.4] (43,51.4] (34.6,43] (9.4,17.8] (17.8,26.2] (9.4,17.8] (43,51.4]

[649] (26.2,34.6] (0.916,9.4] (17.8,26.2] (34.6,43] (51.4,59.8] (17.8,26.2] (43,51.4] (0.916,9.4] (51.4,59.8]

[658] (17.8,26.2] (17.8,26.2] (51.4,59.8] (51.4,59.8] (43,51.4] (17.8,26.2] (43,51.4] (26.2,34.6] (17.8,26.2]

[667] (59.8,68.2] (17.8,26.2] (43,51.4] (9.4,17.8] (9.4,17.8] (34.6,43] (0.916,9.4] (17.8,26.2] (43,51.4]

[676] (51.4,59.8] (17.8,26.2] (9.4,17.8] (0.916,9.4] (9.4,17.8] (0.916,9.4] (9.4,17.8] (43,51.4] (76.6,85.1]

[685] (0.916,9.4] (17.8,26.2] (43,51.4] (34.6,43] (9.4,17.8] (43,51.4] (0.916,9.4] (17.8,26.2] (34.6,43]

[694] (34.6,43] (9.4,17.8] (51.4,59.8] (43,51.4] (9.4,17.8] (26.2,34.6] (17.8,26.2] (9.4,17.8] (34.6,43]

[703] (9.4,17.8] (17.8,26.2] (9.4,17.8] (43,51.4] (43,51.4] (17.8,26.2] (43,51.4] (51.4,59.8] (34.6,43]

[712] (34.6,43] (0.916,9.4] (43,51.4] (34.6,43] (0.916,9.4] (17.8,26.2] (0.916,9.4] (34.6,43] (76.6,85.1]

[721] (51.4,59.8] (17.8,26.2] (9.4,17.8] (17.8,26.2] (43,51.4] (9.4,17.8] (34.6,43] (34.6,43] (0.916,9.4]

[730] (34.6,43] (51.4,59.8] (0.916,9.4] (34.6,43] (68.2,76.6] (0.916,9.4] (9.4,17.8] (34.6,43] (0.916,9.4]

[739] (51.4,59.8] (34.6,43] (26.2,34.6] (0.916,9.4] (43,51.4] (34.6,43] (34.6,43] (26.2,34.6] (76.6,85.1]

[748] (34.6,43] (51.4,59.8] (34.6,43] (26.2,34.6] (9.4,17.8] (26.2,34.6] (17.8,26.2] (0.916,9.4] (51.4,59.8]

[757] (9.4,17.8] (0.916,9.4] (51.4,59.8] (0.916,9.4] (0.916,9.4] (9.4,17.8] (51.4,59.8] (0.916,9.4] (9.4,17.8]

[766] (34.6,43] (68.2,76.6] (9.4,17.8] (9.4,17.8] (9.4,17.8] (17.8,26.2] (34.6,43] (34.6,43] (51.4,59.8]

[775] (76.6,85.1] (43,51.4] (0.916,9.4] (9.4,17.8] (0.916,9.4] (17.8,26.2] (0.916,9.4] (17.8,26.2] (34.6,43]

[784] (0.916,9.4] (43,51.4] (0.916,9.4] (51.4,59.8] (34.6,43] (43,51.4] (43,51.4] (9.4,17.8] (0.916,9.4]

[793] (17.8,26.2] (9.4,17.8] (26.2,34.6] (51.4,59.8] (34.6,43] (9.4,17.8] (51.4,59.8] (34.6,43] (34.6,43]

[802] (9.4,17.8] (34.6,43] (59.8,68.2] (26.2,34.6] (51.4,59.8] (0.916,9.4] (51.4,59.8] (51.4,59.8] (17.8,26.2]

[811] (9.4,17.8] (51.4,59.8] (17.8,26.2] (0.916,9.4] (9.4,17.8] (26.2,34.6] (34.6,43] (26.2,34.6] (26.2,34.6]

[820] (51.4,59.8] (26.2,34.6] (26.2,34.6] (17.8,26.2] (26.2,34.6] (51.4,59.8] (0.916,9.4] (76.6,85.1] (43,51.4]

[829] (51.4,59.8] (17.8,26.2] (17.8,26.2] (34.6,43] (17.8,26.2] (26.2,34.6] (0.916,9.4] (17.8,26.2] (9.4,17.8]

[838] (34.6,43] (34.6,43] (76.6,85.1] (26.2,34.6] (17.8,26.2] (43,51.4] (9.4,17.8] (34.6,43] (9.4,17.8]

[847] (17.8,26.2] (51.4,59.8] (17.8,26.2] (0.916,9.4] (51.4,59.8] (34.6,43] (43,51.4] (0.916,9.4] (0.916,9.4]

[856] (34.6,43] (0.916,9.4] (26.2,34.6] (51.4,59.8] (26.2,34.6] (17.8,26.2] (0.916,9.4] (51.4,59.8] (43,51.4]

[865] (43,51.4] (17.8,26.2] (0.916,9.4] (51.4,59.8] (51.4,59.8] (34.6,43] (26.2,34.6] (17.8,26.2] (9.4,17.8]

[874] (26.2,34.6] (0.916,9.4] (43,51.4] (9.4,17.8] (51.4,59.8] (17.8,26.2] (26.2,34.6] (17.8,26.2] (9.4,17.8]

[883] (9.4,17.8] (43,51.4] (9.4,17.8] (17.8,26.2] (17.8,26.2] (9.4,17.8] (0.916,9.4] (17.8,26.2] (17.8,26.2]

[892] (0.916,9.4] (26.2,34.6] (9.4,17.8] (26.2,34.6] (34.6,43] (34.6,43] (17.8,26.2] (9.4,17.8] (0.916,9.4]

[901] (43,51.4] (9.4,17.8] (43,51.4] (9.4,17.8] (34.6,43] (9.4,17.8] (43,51.4] (51.4,59.8] (34.6,43]

[910] (59.8,68.2] (34.6,43] (43,51.4] (43,51.4] (51.4,59.8] (34.6,43] (34.6,43] (51.4,59.8] (51.4,59.8]

[919] (34.6,43] (34.6,43] (34.6,43] (0.916,9.4] (17.8,26.2] (0.916,9.4] (43,51.4] (34.6,43] (17.8,26.2]

[928] (9.4,17.8] (51.4,59.8] (0.916,9.4] (17.8,26.2] (26.2,34.6] (0.916,9.4] (76.6,85.1] (43,51.4] (26.2,34.6]

[937] (0.916,9.4] (51.4,59.8] (0.916,9.4] (34.6,43] (0.916,9.4] (34.6,43] (51.4,59.8] (17.8,26.2] (9.4,17.8]

[946] (17.8,26.2] (17.8,26.2] (26.2,34.6] (0.916,9.4] (26.2,34.6] (26.2,34.6] (26.2,34.6] (34.6,43] (17.8,26.2]

[955] (43,51.4] (51.4,59.8] (0.916,9.4] (51.4,59.8] (0.916,9.4] (0.916,9.4] (17.8,26.2] (43,51.4] (17.8,26.2]

[964] (17.8,26.2] (43,51.4] (51.4,59.8] (51.4,59.8] (9.4,17.8] (76.6,85.1] (26.2,34.6] (43,51.4] (26.2,34.6]

[973] (34.6,43] (26.2,34.6] (43,51.4] (26.2,34.6] (34.6,43] (26.2,34.6] (51.4,59.8] (9.4,17.8] (0.916,9.4]

[982] (17.8,26.2] (51.4,59.8] (0.916,9.4] (0.916,9.4] (26.2,34.6] (34.6,43] (17.8,26.2] (34.6,43] (51.4,59.8]

[991] (0.916,9.4] (0.916,9.4] (0.916,9.4] (43,51.4] (0.916,9.4] (0.916,9.4] (9.4,17.8] (34.6,43] (34.6,43]

[1000] (26.2,34.6]

[ reached getOption("max.print") -- omitted 19000 entries ]

10 Levels: (0.916,9.4] (9.4,17.8] (17.8,26.2] (26.2,34.6] (34.6,43] (43,51.4] (51.4,59.8] (59.8,68.2] ... (76.6,85.1]

> cut(Prj\_Name\_Length,10,labels=c("First","Second","Third","Fourth","Five","Six","Seven","eight","nine","ten"))

[1] Fourth Second Seven Second Six First Seven Seven Third Seven First Seven Six First Second First

[17] Third Second Seven Five Third Second Six Six Five Third Six First Seven Five Five Five

[33] First Third Fourth Seven Second Fourth Six Third First Seven Second Fourth Seven Third Five Seven

[49] Seven First First First Five Five First Six Six Five Third Six Seven Third Third First

[65] First First Second Third Second Third First First Five Third Fourth Five Five Five Third Six

[81] First Six Seven Five Six First First Five Fourth Fourth Six Five Fourth Seven Seven Second

[97] Third Five Fourth Five Five Six Fourth Fourth Six Fourth Third Fourth Third Seven Seven First

[113] Seven Second Fourth Six Third Fourth Third Third Third Seven First Third Five Seven Third Third

[129] Second Third Five Five Six Seven Six Fourth Fourth Five Five eight Second Fourth Second Second

[145] Fourth Fourth Second First Fourth First First Five First Seven Seven Fourth Five Third Five Third

[161] Fourth Six First Seven Second First First Fourth Third Third First Fourth First Second Second Five

[177] Fourth Seven Five First Second eight Second Third Seven Third Five Fourth Second Seven Fourth First

[193] Five Five First Six Second Second eight First Seven Seven Third First Third Five Six Third

[209] Third First Fourth Second Second Fourth Third Five Fourth Third Seven Six Five First Five Five

[225] Seven Fourth Second Third Third Second Six Seven First First First Five Fourth Third Five First

[241] First Five Six Second Five Six Five Five Five ten Fourth Third Second Third Six Five

[257] Five Second Six Seven ten Third First Five Five Second Third Third Seven Second First Second

[273] First Seven Third Third Six Seven Fourth Seven First Five First Third Third Fourth Seven Six

[289] Third First Six Fourth Five Third First Seven Third Seven Seven Fourth Fourth Second Fourth Second

[305] Second Fourth Six Seven Six Five Third Fourth Third Fourth Fourth Six Seven Third First Third

[321] Third Fourth Six Fourth Six Third Third Five ten Third First Second Five Fourth Six Second

[337] Second Fourth Fourth Five Seven Second Five eight Third First Six Third Second Fourth Third First

[353] Third Third Seven Second First Fourth Fourth Five First Six First Six Six Six First First

[369] Third Third Seven Six Third First Seven Second Five Six Third First Seven Fourth Seven Second

[385] Seven Five Second Third Third Second Five Second Six First Seven Seven First Fourth Third Five

[401] Seven Seven Second First Six Third Third ten nine Second Fourth Third Five Six Seven Fourth

[417] Five First Second Five Five Third Seven Five Second Six Six Seven Six First Seven Five

[433] Seven Six Five Six Second Second Second First Second Fourth Fourth Second Six First Second Fourth

[449] Third Third Third Third Five Six Second First Fourth Six Seven Second Seven First Third Five

[465] Seven Second Third First ten Second Six Second Seven Third Fourth nine Third Six Second Second

[481] Seven First Second Six Fourth ten Seven First Seven First Second First Six Second Second First

[497] Seven Seven Third Third First Third Fourth Six Six Third ten Seven Seven Third Second Third

[513] First Second Six Five Six First Fourth Third Six Six Seven Second Fourth Six Five Five

[529] Fourth First Fourth Second Fourth Second Third Second Six eight Seven Seven Fourth Fourth First Third

[545] First Third Five Seven Fourth Seven Fourth Five Five Fourth Second Second Five Second Six Second

[561] Second Six First First Five Five Third Third Six Seven Third Six Seven Fourth Third Second

[577] First Fourth Six First Seven Third First Third Third Seven Third Six Six Second Third Five

[593] Fourth Fourth Five Seven First Five First Third Five Six Fourth Seven Five Third Fourth Five

[609] Five Five Second First Third Second Six Second Third Seven Second Five First First Five Seven

[625] First Third Third Six Seven Third Third Fourth Second Six Seven First Third Six First Seven

[641] Second First Six Five Second Third Second Six Fourth First Third Five Seven Third Six First

[657] Seven Third Third Seven Seven Six Third Six Fourth Third eight Third Six Second Second Five

[673] First Third Six Seven Third Second First Second First Second Six ten First Third Six Five

[689] Second Six First Third Five Five Second Seven Six Second Fourth Third Second Five Second Third

[705] Second Six Six Third Six Seven Five Five First Six Five First Third First Five ten

[721] Seven Third Second Third Six Second Five Five First Five Seven First Five nine First Second

[737] Five First Seven Five Fourth First Six Five Five Fourth ten Five Seven Five Fourth Second

[753] Fourth Third First Seven Second First Seven First First Second Seven First Second Five nine Second

[769] Second Second Third Five Five Seven ten Six First Second First Third First Third Five First

[785] Six First Seven Five Six Six Second First Third Second Fourth Seven Five Second Seven Five

[801] Five Second Five eight Fourth Seven First Seven Seven Third Second Seven Third First Second Fourth

[817] Five Fourth Fourth Seven Fourth Fourth Third Fourth Seven First ten Six Seven Third Third Five

[833] Third Fourth First Third Second Five Five ten Fourth Third Six Second Five Second Third Seven

[849] Third First Seven Five Six First First Five First Fourth Seven Fourth Third First Seven Six

[865] Six Third First Seven Seven Five Fourth Third Second Fourth First Six Second Seven Third Fourth

[881] Third Second Second Six Second Third Third Second First Third Third First Fourth Second Fourth Five

[897] Five Third Second First Six Second Six Second Five Second Six Seven Five eight Five Six

[913] Six Seven Five Five Seven Seven Five Five Five First Third First Six Five Third Second

[929] Seven First Third Fourth First ten Six Fourth First Seven First Five First Five Seven Third

[945] Second Third Third Fourth First Fourth Fourth Fourth Five Third Six Seven First Seven First First

[961] Third Six Third Third Six Seven Seven Second ten Fourth Six Fourth Five Fourth Six Fourth

[977] Five Fourth Seven Second First Third Seven First First Fourth Five Third Five Seven First First

[993] First Six First First Second Five Five Fourth

[ reached getOption("max.print") -- omitted 19000 entries ]

Levels: First Second Third Fourth Five Six Seven eight nine ten

> Data1$bins<-cut(Prj\_Name\_Length,10,labels=c("First","Second","Third","Fourth","Five","Six","Seven","eight","nine","ten"))

> Data1

name main\_category deadline

1 Acting Out Yoga Presents: Anna in Paris Publishing 7/2/12 23:08

2 Auto Icon Screen Prints Design 3/18/15 1:00

3 Peter Squires' New 7" Record - Recorded by Steve Albini! Music 2/1/16 3:00

4 Much Ado About Nothing Theater 4/30/12 22:00

5 Bacon Food 9/9/14 21:18

6 MARLEY WAS DEAD Publishing 8/1/13 19:00

7 Hip-Hop Script - Rhyming Prose in Poetic Storytelling Form Publishing 10/30/14 21:58

8 They All Fall Down: Book and Music Inspired by True Events Publishing 3/15/13 4:59

9 Power outage survival stove Design 6/7/16 17:07

10 Po-Rum-Bo - A card matching game with an intersecting twist Games 5/29/12 3:00

11 Go F#@D yourself Crafts 11/7/14 0:11

12 Launch Franklin Home Page: The Go To Place for Franklin News Journalism 8/31/12 1:38

13 The First (Ever!) Buffalo Cherry Blossom Festival! Art 12/31/13 21:15

14 Cookie Dunk Dunk Games 4/5/14 16:14

15 RiverRock Music Festival Music 11/3/14 6:00

16 Heroes Everywhere Art 6/6/12 22:31

17 High Voltage Image Making Art 3/26/14 16:33

18 CMYK 4 Poster Series Design 7/19/12 22:35

19 Forensics Forever!- Committed to performing arts excellence! Theater 5/25/15 18:46

20 Nuanced Concrete: Postcards from Apocalypses Art 8/30/13 3:10

21 Never Let the Right One Go Publishing 3/24/12 5:00

22 Joseph & Maka's Studio Dance 3/19/16 21:23

23 Sit Stay Ride: The Story of America's Sidecar Dogs Film & Video 4/4/14 19:08

24 A song to End Slavery. For the FreeWorld 2015 Campaign. Music 10/13/14 7:00

25 Home Grown Books: Fine Art for Beginning Readers Publishing 11/28/11 16:38

26 ParaNova (a neo-noir film) Film & Video 10/23/12 5:59

27 New Album: BRICK AND MORTAR. New Book: HITLESS WONDER. Music 5/11/12 17:47

28 A Hand of Talons Theater 4/13/16 23:02

29 Linknotize, Fund Us and Help Cure Internet Hole Addiction! Games 12/6/15 1:12

30 CAT: A Thruster for Interplanetary CubeSats Technology 8/5/13 23:00

31 These Grey Men: Album and Tour by John Dolmayan Music 8/15/14 6:36

32 LANA - A Short Film Directed By Berman Fenelus Film & Video 2/23/12 17:38

33 UnBorn Hero Film & Video 5/29/15 2:47

34 Destiny's Fate - Round Two! Comics 10/11/12 18:00

35 Learn Game Programming (codeschool.org) Technology 11/25/12 23:10

goal launched state backers .data\_Film...Video .data\_Music .data\_Food .data\_Crafts .data\_Games

1 1500.00 6/2/12 23:08 failed 0 0 0 0 0 0

2 1500.00 2/12/15 19:20 successful 971 0 0 0 0 0

3 500.00 1/5/16 20:40 successful 31 0 1 0 0 0

4 6000.00 3/29/12 15:08 failed 9 0 0 0 0 0

5 23.00 7/11/14 21:18 failed 0 0 0 1 0 0

6 4000.00 7/1/13 19:00 successful 99 0 0 0 0 0

7 2000.00 9/30/14 22:58 failed 1 0 0 0 0 0

8 6000.00 2/6/13 6:07 successful 113 0 0 0 0 0

9 80000.00 4/8/16 17:07 failed 5 0 0 0 0 0

10 10000.00 4/6/12 15:05 failed 33 0 0 0 0 1

11 200.00 10/8/14 0:11 failed 1 0 0 0 1 0

12 10000.00 8/1/12 1:38 failed 13 0 0 0 0 0

13 5000.00 11/26/13 19:56 successful 108 0 0 0 0 0

14 56000.00 2/19/14 16:14 failed 65 0 0 0 0 1

15 25000.00 9/17/14 20:21 failed 5 0 1 0 0 0

16 5000.00 5/7/12 22:31 failed 5 0 0 0 0 0

17 5000.00 2/24/14 17:33 successful 525 0 0 0 0 0

18 750.00 6/4/12 22:35 failed 16 0 0 0 0 0

19 150000.00 4/20/15 18:46 failed 1 0 0 0 0 0

20 307.00 8/1/13 3:10 failed 12 0 0 0 0 0

21 1000.00 3/6/12 19:24 failed 14 0 0 0 0 0

22 7000.00 2/20/16 8:36 failed 37 0 0 0 0 0

23 28000.00 3/5/14 19:08 successful 679 1 0 0 0 0

24 3900.00 9/3/14 5:09 failed 20 0 1 0 0 0

25 7500.00 11/7/11 16:38 successful 80 0 0 0 0 0

26 14500.00 9/28/12 18:21 failed 0 1 0 0 0 0

27 5000.00 3/15/12 2:20 successful 44 0 1 0 0 0

28 3500.00 3/23/16 22:02 successful 57 0 0 0 0 0

29 7500.00 10/7/15 1:12 failed 6 0 0 0 0 1

30 200000.00 7/4/13 11:19 failed 1274 0 0 0 0 0

31 55000.00 6/16/14 6:36 successful 287 0 1 0 0 0

32 10000.00 1/9/12 17:38 successful 153 1 0 0 0 0

33 60000.00 3/30/15 2:47 failed 60 1 0 0 0 0

34 1500.00 9/20/12 1:47 successful 78 0 0 0 0 0

35 700.00 10/26/12 23:10 successful 702 0 0 0 0 0

.data\_Design .data\_Comics .data\_Publishing .data\_Fashion .data\_Theater .data\_Art .data\_Photography .data\_Technology

1 0 0 1 0 0 0 0 0

2 1 0 0 0 0 0 0 0

3 0 0 0 0 0 0 0 0

4 0 0 0 0 1 0 0 0

5 0 0 0 0 0 0 0 0

6 0 0 1 0 0 0 0 0

7 0 0 1 0 0 0 0 0

8 0 0 1 0 0 0 0 0

9 1 0 0 0 0 0 0 0

10 0 0 0 0 0 0 0 0

11 0 0 0 0 0 0 0 0

12 0 0 0 0 0 0 0 0

13 0 0 0 0 0 1 0 0

14 0 0 0 0 0 0 0 0

15 0 0 0 0 0 0 0 0

16 0 0 0 0 0 1 0 0

17 0 0 0 0 0 1 0 0

18 1 0 0 0 0 0 0 0

19 0 0 0 0 1 0 0 0

20 0 0 0 0 0 1 0 0

21 0 0 1 0 0 0 0 0

22 0 0 0 0 0 0 0 0

23 0 0 0 0 0 0 0 0

24 0 0 0 0 0 0 0 0

25 0 0 1 0 0 0 0 0

26 0 0 0 0 0 0 0 0

27 0 0 0 0 0 0 0 0

28 0 0 0 0 1 0 0 0

29 0 0 0 0 0 0 0 0

30 0 0 0 0 0 0 0 1

31 0 0 0 0 0 0 0 0

32 0 0 0 0 0 0 0 0

33 0 0 0 0 0 0 0 0

34 0 1 0 0 0 0 0 0

35 0 0 0 0 0 0 0 1

.data\_Dance .data\_Journalism Season Prj\_Name\_Length Duration Launched\_Year Deadline\_Year bins

1 0 0 Summer 33 30 2012 2012 Fourth

2 0 0 Winter 16 34 2015 2015 Second

3 0 0 Winter 52 27 2016 2016 Seven

4 0 0 Spring 15 32 2012 2012 Second

5 0 0 Summer 45 60 2014 2014 Six

6 0 0 Summer 7 31 2013 2013 First

7 0 0 Fall 54 30 2014 2014 Seven

8 0 0 Winter 54 37 2013 2013 Seven

9 0 0 Spring 20 60 2016 2016 Third

10 0 0 Spring 55 53 2012 2012 Seven

11 0 0 Fall 8 30 2014 2014 First

12 0 1 Summer 57 30 2012 2012 Seven

13 0 0 Fall 46 35 2013 2013 Six

14 0 0 Winter 8 45 2014 2014 First

15 0 0 Fall 17 47 2014 2014 Second

16 0 0 Spring 9 30 2012 2012 First

17 0 0 Winter 18 30 2014 2014 Third

18 0 0 Summer 13 45 2012 2012 Second

19 0 0 Spring 57 35 2015 2015 Seven

20 0 0 Summer 39 29 2013 2013 Five

21 0 0 Spring 19 18 2012 2012 Third

22 1 0 Winter 15 28 2016 2016 Second

23 0 0 Spring 46 30 2014 2014 Six

24 0 0 Fall 51 40 2014 2014 Six

25 0 0 Fall 43 21 2011 2011 Five

26 0 0 Fall 19 25 2012 2012 Third

27 0 0 Spring 50 57 2012 2012 Six

28 0 0 Spring 8 21 2016 2016 First

29 0 0 Fall 54 60 2015 2015 Seven

30 0 0 Summer 38 32 2013 2013 Five

31 0 0 Summer 42 60 2014 2014 Five

32 0 0 Winter 41 45 2012 2012 Five

33 0 0 Spring 3 60 2015 2015 First

34 0 0 Fall 20 21 2012 2012 Third

35 0 0 Fall 33 30 2012 2012 Fourth

[ reached getOption("max.print") -- omitted 19965 rows ]

> summary(Data1)

name main\_category deadline goal launched

#NAME? : 5 Film & Video:3711 6/2/12 5:59 : 6 Min. : 1 3/26/13 20:46: 3

Facade : 2 Music :3229 9/1/10 5:59 : 6 1st Qu.: 2000 8/12/13 22:10: 3

Keys to the City: 2 Publishing :2221 1/1/12 8:59 : 4 Median : 5000 1/10/13 20:46: 2

Music Video : 2 Art :1635 11/1/14 4:59: 4 Mean : 38148 1/14/15 3:01 : 2

My First Film : 2 Games :1486 12/1/14 8:59: 4 3rd Qu.: 15000 1/15/13 16:01: 2

Pangaea : 2 Design :1322 3/1/12 3:00 : 4 Max. :100000000 1/15/15 1:13 : 2

(Other) :19985 (Other) :6396 (Other) :19972 (Other) :19986

state backers .data\_Film...Video .data\_Music .data\_Food .data\_Crafts

failed :11664 Min. : 0.0 Min. :0.0000 Min. :0.0000 Min. :0.0000 Min. :0.0000

successful: 8336 1st Qu.: 2.0 1st Qu.:0.0000 1st Qu.:0.0000 1st Qu.:0.0000 1st Qu.:0.0000

Median : 17.0 Median :0.0000 Median :0.0000 Median :0.0000 Median :0.0000

Mean : 113.2 Mean :0.1855 Mean :0.1615 Mean :0.0656 Mean :0.0232

3rd Qu.: 65.0 3rd Qu.:0.0000 3rd Qu.:0.0000 3rd Qu.:0.0000 3rd Qu.:0.0000

Max. :105857.0 Max. :1.0000 Max. :1.0000 Max. :1.0000 Max. :1.0000

.data\_Games .data\_Design .data\_Comics .data\_Publishing .data\_Fashion .data\_Theater .data\_Art

Min. :0.0000 Min. :0.0000 Min. :0.0000 Min. :0.000 Min. :0.0000 Min. :0.00000 Min. :0.00000

1st Qu.:0.0000 1st Qu.:0.0000 1st Qu.:0.0000 1st Qu.:0.000 1st Qu.:0.0000 1st Qu.:0.00000 1st Qu.:0.00000

Median :0.0000 Median :0.0000 Median :0.0000 Median :0.000 Median :0.0000 Median :0.00000 Median :0.00000

Mean :0.0743 Mean :0.0661 Mean :0.0319 Mean :0.111 Mean :0.0518 Mean :0.03195 Mean :0.08175

3rd Qu.:0.0000 3rd Qu.:0.0000 3rd Qu.:0.0000 3rd Qu.:0.000 3rd Qu.:0.0000 3rd Qu.:0.00000 3rd Qu.:0.00000

Max. :1.0000 Max. :1.0000 Max. :1.0000 Max. :1.000 Max. :1.0000 Max. :1.00000 Max. :1.00000

.data\_Photography .data\_Technology .data\_Dance .data\_Journalism Season Prj\_Name\_Length.Prj\_Name\_Length

Min. :0.00000 Min. :0.0000 Min. :0.00000 Min. :0.00000 Fall :4930 Min. : 1.00000

1st Qu.:0.00000 1st Qu.:0.0000 1st Qu.:0.00000 1st Qu.:0.00000 Spring:5319 1st Qu.:16.00000

Median :0.00000 Median :0.0000 Median :0.00000 Median :0.00000 Summer:5539 Median :29.00000

Mean :0.02845 Mean :0.0627 Mean :0.01265 Mean :0.01155 Winter:4212 Mean :30.87895

3rd Qu.:0.00000 3rd Qu.:0.0000 3rd Qu.:0.00000 3rd Qu.:0.00000 3rd Qu.:46.00000

Max. :1.00000 Max. :1.0000 Max. :1.00000 Max. :1.00000 Max. :85.00000

Duration Launched\_Year Deadline\_Year bins

Min. : 1.0 Min. :2009 Min. :2009 Third :3300

1st Qu.:30.0 1st Qu.:2012 1st Qu.:2012 Five :3066

Median :30.0 Median :2014 Median :2014 Second :2961

Mean :34.5 Mean :2013 Mean :2014 First :2728

3rd Qu.:38.0 3rd Qu.:2015 3rd Qu.:2015 Fourth :2552

Max. :92.0 Max. :2016 Max. :2016 Seven :2397

(Other):2996

> library(caret)

> Train <- createDataPartition(proj$state, p=0.7, list=FALSE)

> training <- Data1[ Train, ]

> testing <- Data1[ -Train, ]

> ctrl <- trainControl(method = "repeatedcv", number = 10, savePredictions = TRUE)

> mod\_fit <- train(state ~ main\_category+goal+Season+Launched\_Year+Duration+Deadline\_Year+bins,data=Data1, method="lda", family="binomial",trControl = ctrl, tuneLength = 5)

> pred = predict(mod\_fit, newdata=testing)

> confusionMatrix(data=pred, testing$state)

Confusion Matrix and Statistics

Reference

Prediction failed successful

failed 2812 1537

successful 687 963

Accuracy : 0.6293

95% CI : (0.6169, 0.6415)

No Information Rate : 0.5833

P-Value [Acc > NIR] : 1.97e-13

Kappa : 0.1985

Mcnemar's Test P-Value : < 2.2e-16

Sensitivity : 0.8037

Specificity : 0.3852

Pos Pred Value : 0.6466

Neg Pred Value : 0.5836

Prevalence : 0.5833

Detection Rate : 0.4687

Detection Prevalence : 0.7250

Balanced Accuracy : 0.5944

'Positive' Class : failed

**QDA Code-**

> getwd()

[1] "/Users/muskanjindal"

> Data1 <- read.csv("/Users/muskanjindal/Desktop/kickstarter-projects/proj.csv")

> head(Data1)

name main\_category deadline goal launched state

1 Acting Out Yoga Presents: Anna in Paris Publishing 7/2/12 23:08 1500 6/2/12 23:08 failed

2 Auto Icon Screen Prints Design 3/18/15 1:00 1500 2/12/15 19:20 successful

3 Peter Squires' New 7" Record - Recorded by Steve Albini! Music 2/1/16 3:00 500 1/5/16 20:40 successful

4 Much Ado About Nothing Theater 4/30/12 22:00 6000 3/29/12 15:08 failed

5 Bacon Food 9/9/14 21:18 23 7/11/14 21:18 failed

6 MARLEY WAS DEAD Publishing 8/1/13 19:00 4000 7/1/13 19:00 successful

backers .data\_Film...Video .data\_Music .data\_Food .data\_Crafts .data\_Games .data\_Design .data\_Comics .data\_Publishing

1 0 0 0 0 0 0 0 0 1

2 971 0 0 0 0 0 1 0 0

3 31 0 1 0 0 0 0 0 0

4 9 0 0 0 0 0 0 0 0

5 0 0 0 1 0 0 0 0 0

6 99 0 0 0 0 0 0 0 1

.data\_Fashion .data\_Theater .data\_Art .data\_Photography .data\_Technology .data\_Dance .data\_Journalism Season

1 0 0 0 0 0 0 0 Summer

2 0 0 0 0 0 0 0 Winter

3 0 0 0 0 0 0 0 Winter

4 0 1 0 0 0 0 0 Spring

5 0 0 0 0 0 0 0 Summer

6 0 0 0 0 0 0 0 Summer

Prj\_Name\_Length Duration Launched\_Year Deadline\_Year

1 39 30 2012 2012

2 23 34 2015 2015

3 56 27 2016 2016

4 22 32 2012 2012

5 5 60 2014 2014

6 15 31 2013 2013

> num\_columns <- c('Prj\_Name\_Length')

> Data1[num\_columns] <- sapply(Data1[num\_columns], as.numeric)

> Prj\_Name\_Length<-Data1$Prj\_Name\_Length

> Prj\_Name\_Length

[2,] 16

[3,] 52

[4,] 15

[5,] 45

[6,] 7

[7,] 54

[8,] 54

[9,] 20

[10,] 55

> cut(Prj\_Name\_Length,10)

[1] (26.2,34.6] (9.4,17.8] (51.4,59.8] (9.4,17.8] (43,51.4] (0.916,9.4] (51.4,59.8] (51.4,59.8] (17.8,26.2]

[10] (51.4,59.8] (0.916,9.4] (51.4,59.8] (43,51.4] (0.916,9.4] (9.4,17.8] (0.916,9.4] (17.8,26.2] (9.4,17.8]

[19] (51.4,59.8] (34.6,43] (17.8,26.2] (9.4,17.8] (43,51.4] (43,51.4] (34.6,43] (17.8,26.2] (43,51.4]

[28] (0.916,9.4] (51.4,59.8] (34.6,43] (34.6,43] (34.6,43] (0.916,9.4] (17.8,26.2] (26.2,34.6] (51.4,59.8]

[37] (9.4,17.8] (26.2,34.6] (43,51.4] (17.8,26.2] (0.916,9.4] (51.4,59.8] (9.4,17.8] (26.2,34.6] (51.4,59.8]

[46] (17.8,26.2] (34.6,43] (51.4,59.8] (51.4,59.8] (0.916,9.4] (0.916,9.4] (0.916,9.4] (34.6,43] (34.6,43]

[55] (0.916,9.4] (43,51.4] (43,51.4] (34.6,43] (17.8,26.2] (43,51.4] (51.4,59.8] (17.8,26.2] (17.8,26.2]

[64] (0.916,9.4] (0.916,9.4] (0.916,9.4] (9.4,17.8] (17.8,26.2] (9.4,17.8] (17.8,26.2] (0.916,9.4] (0.916,9.4]

[73] (34.6,43] (17.8,26.2] (26.2,34.6] (34.6,43] (34.6,43] (34.6,43] (17.8,26.2] (43,51.4] (0.916,9.4]

[82] (43,51.4] (51.4,59.8] (34.6,43] (43,51.4] (0.916,9.4] (0.916,9.4] (34.6,43] (26.2,34.6] (26.2,34.6]

[91] (43,51.4] (34.6,43] (26.2,34.6] (51.4,59.8] (51.4,59.8] (9.4,17.8] (17.8,26.2] (34.6,43] (26.2,34.6]

[100] (34.6,43] (34.6,43] (43,51.4] (26.2,34.6] (26.2,34.6] (43,51.4] (26.2,34.6] (17.8,26.2] (26.2,34.6]

[109] (17.8,26.2] (51.4,59.8] (51.4,59.8] (0.916,9.4] (51.4,59.8] (9.4,17.8] (26.2,34.6] (43,51.4] (17.8,26.2]

[118] (26.2,34.6] (17.8,26.2] (17.8,26.2] (17.8,26.2] (51.4,59.8] (0.916,9.4] (17.8,26.2] (34.6,43] (51.4,59.8]

[127] (17.8,26.2] (17.8,26.2] (9.4,17.8] (17.8,26.2] (34.6,43] (34.6,43] (43,51.4] (51.4,59.8] (43,51.4]

[136] (26.2,34.6] (26.2,34.6] (34.6,43] (34.6,43] (59.8,68.2] (9.4,17.8] (26.2,34.6] (9.4,17.8] (9.4,17.8]

[145] (26.2,34.6] (26.2,34.6] (9.4,17.8] (0.916,9.4] (26.2,34.6] (0.916,9.4] (0.916,9.4] (34.6,43] (0.916,9.4]

[154] (51.4,59.8] (51.4,59.8] (26.2,34.6] (34.6,43] (17.8,26.2] (34.6,43] (17.8,26.2] (26.2,34.6] (43,51.4]

[163] (0.916,9.4] (51.4,59.8] (9.4,17.8] (0.916,9.4] (0.916,9.4] (26.2,34.6] (17.8,26.2] (17.8,26.2] (0.916,9.4]

[172] (26.2,34.6] (0.916,9.4] (9.4,17.8] (9.4,17.8] (34.6,43] (26.2,34.6] (51.4,59.8] (34.6,43] (0.916,9.4]

[181] (9.4,17.8] (59.8,68.2] (9.4,17.8] (17.8,26.2] (51.4,59.8] (17.8,26.2] (34.6,43] (26.2,34.6] (9.4,17.8]

[190] (51.4,59.8] (26.2,34.6] (0.916,9.4] (34.6,43] (34.6,43] (0.916,9.4] (43,51.4] (9.4,17.8] (9.4,17.8]

[199] (59.8,68.2] (0.916,9.4] (51.4,59.8] (51.4,59.8] (17.8,26.2] (0.916,9.4] (17.8,26.2] (34.6,43] (43,51.4]

[208] (17.8,26.2] (17.8,26.2] (0.916,9.4] (26.2,34.6] (9.4,17.8] (9.4,17.8] (26.2,34.6] (17.8,26.2] (34.6,43]

[217] (26.2,34.6] (17.8,26.2] (51.4,59.8] (43,51.4] (34.6,43] (0.916,9.4] (34.6,43] (34.6,43] (51.4,59.8]

[226] (26.2,34.6] (9.4,17.8] (17.8,26.2] (17.8,26.2] (9.4,17.8] (43,51.4] (51.4,59.8] (0.916,9.4] (0.916,9.4]

[235] (0.916,9.4] (34.6,43] (26.2,34.6] (17.8,26.2] (34.6,43] (0.916,9.4] (0.916,9.4] (34.6,43] (43,51.4]

[244] (9.4,17.8] (34.6,43] (43,51.4] (34.6,43] (34.6,43] (34.6,43] (76.6,85.1] (26.2,34.6] (17.8,26.2]

[253] (9.4,17.8] (17.8,26.2] (43,51.4] (34.6,43] (34.6,43] (9.4,17.8] (43,51.4] (51.4,59.8] (76.6,85.1]

[262] (17.8,26.2] (0.916,9.4] (34.6,43] (34.6,43] (9.4,17.8] (17.8,26.2] (17.8,26.2] (51.4,59.8] (9.4,17.8]

[271] (0.916,9.4] (9.4,17.8] (0.916,9.4] (51.4,59.8] (17.8,26.2] (17.8,26.2] (43,51.4] (51.4,59.8] (26.2,34.6]

[280] (51.4,59.8] (0.916,9.4] (34.6,43] (0.916,9.4] (17.8,26.2] (17.8,26.2] (26.2,34.6] (51.4,59.8] (43,51.4]

[289] (17.8,26.2] (0.916,9.4] (43,51.4] (26.2,34.6] (34.6,43] (17.8,26.2] (0.916,9.4] (51.4,59.8] (17.8,26.2]

[298] (51.4,59.8] (51.4,59.8] (26.2,34.6] (26.2,34.6] (9.4,17.8] (26.2,34.6] (9.4,17.8] (9.4,17.8] (26.2,34.6]

[307] (43,51.4] (51.4,59.8] (43,51.4] (34.6,43] (17.8,26.2] (26.2,34.6] (17.8,26.2] (26.2,34.6] (26.2,34.6]

[316] (43,51.4] (51.4,59.8] (17.8,26.2] (0.916,9.4] (17.8,26.2] (17.8,26.2] (26.2,34.6] (43,51.4] (26.2,34.6]

[325] (43,51.4] (17.8,26.2] (17.8,26.2] (34.6,43] (76.6,85.1] (17.8,26.2] (0.916,9.4] (9.4,17.8] (34.6,43]

[334] (26.2,34.6] (43,51.4] (9.4,17.8] (9.4,17.8] (26.2,34.6] (26.2,34.6] (34.6,43] (51.4,59.8] (9.4,17.8]

[343] (34.6,43] (59.8,68.2] (17.8,26.2] (0.916,9.4] (43,51.4] (17.8,26.2] (9.4,17.8] (26.2,34.6] (17.8,26.2]

[352] (0.916,9.4] (17.8,26.2] (17.8,26.2] (51.4,59.8] (9.4,17.8] (0.916,9.4] (26.2,34.6] (26.2,34.6] (34.6,43]

[361] (0.916,9.4] (43,51.4] (0.916,9.4] (43,51.4] (43,51.4] (43,51.4] (0.916,9.4] (0.916,9.4] (17.8,26.2]

[370] (17.8,26.2] (51.4,59.8] (43,51.4] (17.8,26.2] (0.916,9.4] (51.4,59.8] (9.4,17.8] (34.6,43] (43,51.4]

[379] (17.8,26.2] (0.916,9.4] (51.4,59.8] (26.2,34.6] (51.4,59.8] (9.4,17.8] (51.4,59.8] (34.6,43] (9.4,17.8]

[388] (17.8,26.2] (17.8,26.2] (9.4,17.8] (34.6,43] (9.4,17.8] (43,51.4] (0.916,9.4] (51.4,59.8] (51.4,59.8]

[397] (0.916,9.4] (26.2,34.6] (17.8,26.2] (34.6,43] (51.4,59.8] (51.4,59.8] (9.4,17.8] (0.916,9.4] (43,51.4]

[406] (17.8,26.2] (17.8,26.2] (76.6,85.1] (68.2,76.6] (9.4,17.8] (26.2,34.6] (17.8,26.2] (34.6,43] (43,51.4]

[415] (51.4,59.8] (26.2,34.6] (34.6,43] (0.916,9.4] (9.4,17.8] (34.6,43] (34.6,43] (17.8,26.2] (51.4,59.8]

[424] (34.6,43] (9.4,17.8] (43,51.4] (43,51.4] (51.4,59.8] (43,51.4] (0.916,9.4] (51.4,59.8] (34.6,43]

[433] (51.4,59.8] (43,51.4] (34.6,43] (43,51.4] (9.4,17.8] (9.4,17.8] (9.4,17.8] (0.916,9.4] (9.4,17.8]

[442] (26.2,34.6] (26.2,34.6] (9.4,17.8] (43,51.4] (0.916,9.4] (9.4,17.8] (26.2,34.6] (17.8,26.2] (17.8,26.2]

[451] (17.8,26.2] (17.8,26.2] (34.6,43] (43,51.4] (9.4,17.8] (0.916,9.4] (26.2,34.6] (43,51.4] (51.4,59.8]

[460] (9.4,17.8] (51.4,59.8] (0.916,9.4] (17.8,26.2] (34.6,43] (51.4,59.8] (9.4,17.8] (17.8,26.2] (0.916,9.4]

[469] (76.6,85.1] (9.4,17.8] (43,51.4] (9.4,17.8] (51.4,59.8] (17.8,26.2] (26.2,34.6] (68.2,76.6] (17.8,26.2]

[478] (43,51.4] (9.4,17.8] (9.4,17.8] (51.4,59.8] (0.916,9.4] (9.4,17.8] (43,51.4] (26.2,34.6] (76.6,85.1]

[487] (51.4,59.8] (0.916,9.4] (51.4,59.8] (0.916,9.4] (9.4,17.8] (0.916,9.4] (43,51.4] (9.4,17.8] (9.4,17.8]

[496] (0.916,9.4] (51.4,59.8] (51.4,59.8] (17.8,26.2] (17.8,26.2] (0.916,9.4] (17.8,26.2] (26.2,34.6] (43,51.4]

[505] (43,51.4] (17.8,26.2] (76.6,85.1] (51.4,59.8] (51.4,59.8] (17.8,26.2] (9.4,17.8] (17.8,26.2] (0.916,9.4]

[514] (9.4,17.8] (43,51.4] (34.6,43] (43,51.4] (0.916,9.4] (26.2,34.6] (17.8,26.2] (43,51.4] (43,51.4]

[523] (51.4,59.8] (9.4,17.8] (26.2,34.6] (43,51.4] (34.6,43] (34.6,43] (26.2,34.6] (0.916,9.4] (26.2,34.6]

[532] (9.4,17.8] (26.2,34.6] (9.4,17.8] (17.8,26.2] (9.4,17.8] (43,51.4] (59.8,68.2] (51.4,59.8] (51.4,59.8]

[541] (26.2,34.6] (26.2,34.6] (0.916,9.4] (17.8,26.2] (0.916,9.4] (17.8,26.2] (34.6,43] (51.4,59.8] (26.2,34.6]

[550] (51.4,59.8] (26.2,34.6] (34.6,43] (34.6,43] (26.2,34.6] (9.4,17.8] (9.4,17.8] (34.6,43] (9.4,17.8]

[559] (43,51.4] (9.4,17.8] (9.4,17.8] (43,51.4] (0.916,9.4] (0.916,9.4] (34.6,43] (34.6,43] (17.8,26.2]

[568] (17.8,26.2] (43,51.4] (51.4,59.8] (17.8,26.2] (43,51.4] (51.4,59.8] (26.2,34.6] (17.8,26.2] (9.4,17.8]

[577] (0.916,9.4] (26.2,34.6] (43,51.4] (0.916,9.4] (51.4,59.8] (17.8,26.2] (0.916,9.4] (17.8,26.2] (17.8,26.2]

[586] (51.4,59.8] (17.8,26.2] (43,51.4] (43,51.4] (9.4,17.8] (17.8,26.2] (34.6,43] (26.2,34.6] (26.2,34.6]

[595] (34.6,43] (51.4,59.8] (0.916,9.4] (34.6,43] (0.916,9.4] (17.8,26.2] (34.6,43] (43,51.4] (26.2,34.6]

[604] (51.4,59.8] (34.6,43] (17.8,26.2] (26.2,34.6] (34.6,43] (34.6,43] (34.6,43] (9.4,17.8] (0.916,9.4]

[613] (17.8,26.2] (9.4,17.8] (43,51.4] (9.4,17.8] (17.8,26.2] (51.4,59.8] (9.4,17.8] (34.6,43] (0.916,9.4]

[622] (0.916,9.4] (34.6,43] (51.4,59.8] (0.916,9.4] (17.8,26.2] (17.8,26.2] (43,51.4] (51.4,59.8] (17.8,26.2]

[631] (17.8,26.2] (26.2,34.6] (9.4,17.8] (43,51.4] (51.4,59.8] (0.916,9.4] (17.8,26.2] (43,51.4] (0.916,9.4]

[640] (51.4,59.8] (9.4,17.8] (0.916,9.4] (43,51.4] (34.6,43] (9.4,17.8] (17.8,26.2] (9.4,17.8] (43,51.4]

[649] (26.2,34.6] (0.916,9.4] (17.8,26.2] (34.6,43] (51.4,59.8] (17.8,26.2] (43,51.4] (0.916,9.4] (51.4,59.8]

[658] (17.8,26.2] (17.8,26.2] (51.4,59.8] (51.4,59.8] (43,51.4] (17.8,26.2] (43,51.4] (26.2,34.6] (17.8,26.2]

[667] (59.8,68.2] (17.8,26.2] (43,51.4] (9.4,17.8] (9.4,17.8] (34.6,43] (0.916,9.4] (17.8,26.2] (43,51.4]

[676] (51.4,59.8] (17.8,26.2] (9.4,17.8] (0.916,9.4] (9.4,17.8] (0.916,9.4] (9.4,17.8] (43,51.4] (76.6,85.1]

[685] (0.916,9.4] (17.8,26.2] (43,51.4] (34.6,43] (9.4,17.8] (43,51.4] (0.916,9.4] (17.8,26.2] (34.6,43]

[694] (34.6,43] (9.4,17.8] (51.4,59.8] (43,51.4] (9.4,17.8] (26.2,34.6] (17.8,26.2] (9.4,17.8] (34.6,43]

[703] (9.4,17.8] (17.8,26.2] (9.4,17.8] (43,51.4] (43,51.4] (17.8,26.2] (43,51.4] (51.4,59.8] (34.6,43]

[712] (34.6,43] (0.916,9.4] (43,51.4] (34.6,43] (0.916,9.4] (17.8,26.2] (0.916,9.4] (34.6,43] (76.6,85.1]

[721] (51.4,59.8] (17.8,26.2] (9.4,17.8] (17.8,26.2] (43,51.4] (9.4,17.8] (34.6,43] (34.6,43] (0.916,9.4]

[730] (34.6,43] (51.4,59.8] (0.916,9.4] (34.6,43] (68.2,76.6] (0.916,9.4] (9.4,17.8] (34.6,43] (0.916,9.4]

[739] (51.4,59.8] (34.6,43] (26.2,34.6] (0.916,9.4] (43,51.4] (34.6,43] (34.6,43] (26.2,34.6] (76.6,85.1]

[748] (34.6,43] (51.4,59.8] (34.6,43] (26.2,34.6] (9.4,17.8] (26.2,34.6] (17.8,26.2] (0.916,9.4] (51.4,59.8]

[757] (9.4,17.8] (0.916,9.4] (51.4,59.8] (0.916,9.4] (0.916,9.4] (9.4,17.8] (51.4,59.8] (0.916,9.4] (9.4,17.8]

[766] (34.6,43] (68.2,76.6] (9.4,17.8] (9.4,17.8] (9.4,17.8] (17.8,26.2] (34.6,43] (34.6,43] (51.4,59.8]

[775] (76.6,85.1] (43,51.4] (0.916,9.4] (9.4,17.8] (0.916,9.4] (17.8,26.2] (0.916,9.4] (17.8,26.2] (34.6,43]

[784] (0.916,9.4] (43,51.4] (0.916,9.4] (51.4,59.8] (34.6,43] (43,51.4] (43,51.4] (9.4,17.8] (0.916,9.4]

[793] (17.8,26.2] (9.4,17.8] (26.2,34.6] (51.4,59.8] (34.6,43] (9.4,17.8] (51.4,59.8] (34.6,43] (34.6,43]

[802] (9.4,17.8] (34.6,43] (59.8,68.2] (26.2,34.6] (51.4,59.8] (0.916,9.4] (51.4,59.8] (51.4,59.8] (17.8,26.2]

[811] (9.4,17.8] (51.4,59.8] (17.8,26.2] (0.916,9.4] (9.4,17.8] (26.2,34.6] (34.6,43] (26.2,34.6] (26.2,34.6]

[820] (51.4,59.8] (26.2,34.6] (26.2,34.6] (17.8,26.2] (26.2,34.6] (51.4,59.8] (0.916,9.4] (76.6,85.1] (43,51.4]

[829] (51.4,59.8] (17.8,26.2] (17.8,26.2] (34.6,43] (17.8,26.2] (26.2,34.6] (0.916,9.4] (17.8,26.2] (9.4,17.8]

[838] (34.6,43] (34.6,43] (76.6,85.1] (26.2,34.6] (17.8,26.2] (43,51.4] (9.4,17.8] (34.6,43] (9.4,17.8]

[847] (17.8,26.2] (51.4,59.8] (17.8,26.2] (0.916,9.4] (51.4,59.8] (34.6,43] (43,51.4] (0.916,9.4] (0.916,9.4]

[856] (34.6,43] (0.916,9.4] (26.2,34.6] (51.4,59.8] (26.2,34.6] (17.8,26.2] (0.916,9.4] (51.4,59.8] (43,51.4]

[865] (43,51.4] (17.8,26.2] (0.916,9.4] (51.4,59.8] (51.4,59.8] (34.6,43] (26.2,34.6] (17.8,26.2] (9.4,17.8]

[874] (26.2,34.6] (0.916,9.4] (43,51.4] (9.4,17.8] (51.4,59.8] (17.8,26.2] (26.2,34.6] (17.8,26.2] (9.4,17.8]

[883] (9.4,17.8] (43,51.4] (9.4,17.8] (17.8,26.2] (17.8,26.2] (9.4,17.8] (0.916,9.4] (17.8,26.2] (17.8,26.2]

[892] (0.916,9.4] (26.2,34.6] (9.4,17.8] (26.2,34.6] (34.6,43] (34.6,43] (17.8,26.2] (9.4,17.8] (0.916,9.4]

[901] (43,51.4] (9.4,17.8] (43,51.4] (9.4,17.8] (34.6,43] (9.4,17.8] (43,51.4] (51.4,59.8] (34.6,43]

[910] (59.8,68.2] (34.6,43] (43,51.4] (43,51.4] (51.4,59.8] (34.6,43] (34.6,43] (51.4,59.8] (51.4,59.8]

[919] (34.6,43] (34.6,43] (34.6,43] (0.916,9.4] (17.8,26.2] (0.916,9.4] (43,51.4] (34.6,43] (17.8,26.2]

[928] (9.4,17.8] (51.4,59.8] (0.916,9.4] (17.8,26.2] (26.2,34.6] (0.916,9.4] (76.6,85.1] (43,51.4] (26.2,34.6]

[937] (0.916,9.4] (51.4,59.8] (0.916,9.4] (34.6,43] (0.916,9.4] (34.6,43] (51.4,59.8] (17.8,26.2] (9.4,17.8]

[946] (17.8,26.2] (17.8,26.2] (26.2,34.6] (0.916,9.4] (26.2,34.6] (26.2,34.6] (26.2,34.6] (34.6,43] (17.8,26.2]

[955] (43,51.4] (51.4,59.8] (0.916,9.4] (51.4,59.8] (0.916,9.4] (0.916,9.4] (17.8,26.2] (43,51.4] (17.8,26.2]

[964] (17.8,26.2] (43,51.4] (51.4,59.8] (51.4,59.8] (9.4,17.8] (76.6,85.1] (26.2,34.6] (43,51.4] (26.2,34.6]

[973] (34.6,43] (26.2,34.6] (43,51.4] (26.2,34.6] (34.6,43] (26.2,34.6] (51.4,59.8] (9.4,17.8] (0.916,9.4]

[982] (17.8,26.2] (51.4,59.8] (0.916,9.4] (0.916,9.4] (26.2,34.6] (34.6,43] (17.8,26.2] (34.6,43] (51.4,59.8]

[991] (0.916,9.4] (0.916,9.4] (0.916,9.4] (43,51.4] (0.916,9.4] (0.916,9.4] (9.4,17.8] (34.6,43] (34.6,43]

[1000] (26.2,34.6]

[ reached getOption("max.print") -- omitted 19000 entries ]

10 Levels: (0.916,9.4] (9.4,17.8] (17.8,26.2] (26.2,34.6] (34.6,43] (43,51.4] (51.4,59.8] (59.8,68.2] ... (76.6,85.1]

> cut(Prj\_Name\_Length,10,labels=c("First","Second","Third","Fourth","Five","Six","Seven","eight","nine","ten"))

[1] Fourth Second Seven Second Six First Seven Seven Third Seven First Seven Six First Second First

[17] Third Second Seven Five Third Second Six Six Five Third Six First Seven Five Five Five

[33] First Third Fourth Seven Second Fourth Six Third First Seven Second Fourth Seven Third Five Seven

[49] Seven First First First Five Five First Six Six Five Third Six Seven Third Third First

[65] First First Second Third Second Third First First Five Third Fourth Five Five Five Third Six

[81] First Six Seven Five Six First First Five Fourth Fourth Six Five Fourth Seven Seven Second

[97] Third Five Fourth Five Five Six Fourth Fourth Six Fourth Third Fourth Third Seven Seven First

[113] Seven Second Fourth Six Third Fourth Third Third Third Seven First Third Five Seven Third Third

[129] Second Third Five Five Six Seven Six Fourth Fourth Five Five eight Second Fourth Second Second

[145] Fourth Fourth Second First Fourth First First Five First Seven Seven Fourth Five Third Five Third

[161] Fourth Six First Seven Second First First Fourth Third Third First Fourth First Second Second Five

[177] Fourth Seven Five First Second eight Second Third Seven Third Five Fourth Second Seven Fourth First

[193] Five Five First Six Second Second eight First Seven Seven Third First Third Five Six Third

[209] Third First Fourth Second Second Fourth Third Five Fourth Third Seven Six Five First Five Five

[225] Seven Fourth Second Third Third Second Six Seven First First First Five Fourth Third Five First

[241] First Five Six Second Five Six Five Five Five ten Fourth Third Second Third Six Five

[257] Five Second Six Seven ten Third First Five Five Second Third Third Seven Second First Second

[273] First Seven Third Third Six Seven Fourth Seven First Five First Third Third Fourth Seven Six

[289] Third First Six Fourth Five Third First Seven Third Seven Seven Fourth Fourth Second Fourth Second

[305] Second Fourth Six Seven Six Five Third Fourth Third Fourth Fourth Six Seven Third First Third

[321] Third Fourth Six Fourth Six Third Third Five ten Third First Second Five Fourth Six Second

[337] Second Fourth Fourth Five Seven Second Five eight Third First Six Third Second Fourth Third First

[353] Third Third Seven Second First Fourth Fourth Five First Six First Six Six Six First First

[369] Third Third Seven Six Third First Seven Second Five Six Third First Seven Fourth Seven Second

[385] Seven Five Second Third Third Second Five Second Six First Seven Seven First Fourth Third Five

[401] Seven Seven Second First Six Third Third ten nine Second Fourth Third Five Six Seven Fourth

[417] Five First Second Five Five Third Seven Five Second Six Six Seven Six First Seven Five

[433] Seven Six Five Six Second Second Second First Second Fourth Fourth Second Six First Second Fourth

[449] Third Third Third Third Five Six Second First Fourth Six Seven Second Seven First Third Five

[465] Seven Second Third First ten Second Six Second Seven Third Fourth nine Third Six Second Second

[481] Seven First Second Six Fourth ten Seven First Seven First Second First Six Second Second First

[497] Seven Seven Third Third First Third Fourth Six Six Third ten Seven Seven Third Second Third

[513] First Second Six Five Six First Fourth Third Six Six Seven Second Fourth Six Five Five

[529] Fourth First Fourth Second Fourth Second Third Second Six eight Seven Seven Fourth Fourth First Third

[545] First Third Five Seven Fourth Seven Fourth Five Five Fourth Second Second Five Second Six Second

[561] Second Six First First Five Five Third Third Six Seven Third Six Seven Fourth Third Second

[577] First Fourth Six First Seven Third First Third Third Seven Third Six Six Second Third Five

[593] Fourth Fourth Five Seven First Five First Third Five Six Fourth Seven Five Third Fourth Five

[609] Five Five Second First Third Second Six Second Third Seven Second Five First First Five Seven

[625] First Third Third Six Seven Third Third Fourth Second Six Seven First Third Six First Seven

[641] Second First Six Five Second Third Second Six Fourth First Third Five Seven Third Six First

[657] Seven Third Third Seven Seven Six Third Six Fourth Third eight Third Six Second Second Five

[673] First Third Six Seven Third Second First Second First Second Six ten First Third Six Five

[689] Second Six First Third Five Five Second Seven Six Second Fourth Third Second Five Second Third

[705] Second Six Six Third Six Seven Five Five First Six Five First Third First Five ten

[721] Seven Third Second Third Six Second Five Five First Five Seven First Five nine First Second

[737] Five First Seven Five Fourth First Six Five Five Fourth ten Five Seven Five Fourth Second

[753] Fourth Third First Seven Second First Seven First First Second Seven First Second Five nine Second

[769] Second Second Third Five Five Seven ten Six First Second First Third First Third Five First

[785] Six First Seven Five Six Six Second First Third Second Fourth Seven Five Second Seven Five

[801] Five Second Five eight Fourth Seven First Seven Seven Third Second Seven Third First Second Fourth

[817] Five Fourth Fourth Seven Fourth Fourth Third Fourth Seven First ten Six Seven Third Third Five

[833] Third Fourth First Third Second Five Five ten Fourth Third Six Second Five Second Third Seven

[849] Third First Seven Five Six First First Five First Fourth Seven Fourth Third First Seven Six

[865] Six Third First Seven Seven Five Fourth Third Second Fourth First Six Second Seven Third Fourth

[881] Third Second Second Six Second Third Third Second First Third Third First Fourth Second Fourth Five

[897] Five Third Second First Six Second Six Second Five Second Six Seven Five eight Five Six

[913] Six Seven Five Five Seven Seven Five Five Five First Third First Six Five Third Second

[929] Seven First Third Fourth First ten Six Fourth First Seven First Five First Five Seven Third

[945] Second Third Third Fourth First Fourth Fourth Fourth Five Third Six Seven First Seven First First

[961] Third Six Third Third Six Seven Seven Second ten Fourth Six Fourth Five Fourth Six Fourth

[977] Five Fourth Seven Second First Third Seven First First Fourth Five Third Five Seven First First

[993] First Six First First Second Five Five Fourth

[ reached getOption("max.print") -- omitted 19000 entries ]

Levels: First Second Third Fourth Five Six Seven eight nine ten

> Data1$bins<-cut(Prj\_Name\_Length,10,labels=c("First","Second","Third","Fourth","Five","Six","Seven","eight","nine","ten"))

> Data1

name main\_category deadline

1 Acting Out Yoga Presents: Anna in Paris Publishing 7/2/12 23:08

2 Auto Icon Screen Prints Design 3/18/15 1:00

3 Peter Squires' New 7" Record - Recorded by Steve Albini! Music 2/1/16 3:00

4 Much Ado About Nothing Theater 4/30/12 22:00

5 Bacon Food 9/9/14 21:18

6 MARLEY WAS DEAD Publishing 8/1/13 19:00

7 Hip-Hop Script - Rhyming Prose in Poetic Storytelling Form Publishing 10/30/14 21:58

8 They All Fall Down: Book and Music Inspired by True Events Publishing 3/15/13 4:59

9 Power outage survival stove Design 6/7/16 17:07

10 Po-Rum-Bo - A card matching game with an intersecting twist Games 5/29/12 3:00

11 Go F#@D yourself Crafts 11/7/14 0:11

12 Launch Franklin Home Page: The Go To Place for Franklin News Journalism 8/31/12 1:38

13 The First (Ever!) Buffalo Cherry Blossom Festival! Art 12/31/13 21:15

14 Cookie Dunk Dunk Games 4/5/14 16:14

15 RiverRock Music Festival Music 11/3/14 6:00

16 Heroes Everywhere Art 6/6/12 22:31

17 High Voltage Image Making Art 3/26/14 16:33

18 CMYK 4 Poster Series Design 7/19/12 22:35

19 Forensics Forever!- Committed to performing arts excellence! Theater 5/25/15 18:46

20 Nuanced Concrete: Postcards from Apocalypses Art 8/30/13 3:10

21 Never Let the Right One Go Publishing 3/24/12 5:00

22 Joseph & Maka's Studio Dance 3/19/16 21:23

23 Sit Stay Ride: The Story of America's Sidecar Dogs Film & Video 4/4/14 19:08

24 A song to End Slavery. For the FreeWorld 2015 Campaign. Music 10/13/14 7:00

25 Home Grown Books: Fine Art for Beginning Readers Publishing 11/28/11 16:38

26 ParaNova (a neo-noir film) Film & Video 10/23/12 5:59

27 New Album: BRICK AND MORTAR. New Book: HITLESS WONDER. Music 5/11/12 17:47

28 A Hand of Talons Theater 4/13/16 23:02

29 Linknotize, Fund Us and Help Cure Internet Hole Addiction! Games 12/6/15 1:12

30 CAT: A Thruster for Interplanetary CubeSats Technology 8/5/13 23:00

31 These Grey Men: Album and Tour by John Dolmayan Music 8/15/14 6:36

32 LANA - A Short Film Directed By Berman Fenelus Film & Video 2/23/12 17:38

33 UnBorn Hero Film & Video 5/29/15 2:47

34 Destiny's Fate - Round Two! Comics 10/11/12 18:00

35 Learn Game Programming (codeschool.org) Technology 11/25/12 23:10

goal launched state backers .data\_Film...Video .data\_Music .data\_Food .data\_Crafts .data\_Games

1 1500.00 6/2/12 23:08 failed 0 0 0 0 0 0

2 1500.00 2/12/15 19:20 successful 971 0 0 0 0 0

3 500.00 1/5/16 20:40 successful 31 0 1 0 0 0

4 6000.00 3/29/12 15:08 failed 9 0 0 0 0 0

5 23.00 7/11/14 21:18 failed 0 0 0 1 0 0

6 4000.00 7/1/13 19:00 successful 99 0 0 0 0 0

7 2000.00 9/30/14 22:58 failed 1 0 0 0 0 0

8 6000.00 2/6/13 6:07 successful 113 0 0 0 0 0

9 80000.00 4/8/16 17:07 failed 5 0 0 0 0 0

10 10000.00 4/6/12 15:05 failed 33 0 0 0 0 1

11 200.00 10/8/14 0:11 failed 1 0 0 0 1 0

12 10000.00 8/1/12 1:38 failed 13 0 0 0 0 0

13 5000.00 11/26/13 19:56 successful 108 0 0 0 0 0

14 56000.00 2/19/14 16:14 failed 65 0 0 0 0 1

15 25000.00 9/17/14 20:21 failed 5 0 1 0 0 0

16 5000.00 5/7/12 22:31 failed 5 0 0 0 0 0

17 5000.00 2/24/14 17:33 successful 525 0 0 0 0 0

18 750.00 6/4/12 22:35 failed 16 0 0 0 0 0

19 150000.00 4/20/15 18:46 failed 1 0 0 0 0 0

20 307.00 8/1/13 3:10 failed 12 0 0 0 0 0

21 1000.00 3/6/12 19:24 failed 14 0 0 0 0 0

22 7000.00 2/20/16 8:36 failed 37 0 0 0 0 0

23 28000.00 3/5/14 19:08 successful 679 1 0 0 0 0

24 3900.00 9/3/14 5:09 failed 20 0 1 0 0 0

25 7500.00 11/7/11 16:38 successful 80 0 0 0 0 0

26 14500.00 9/28/12 18:21 failed 0 1 0 0 0 0

27 5000.00 3/15/12 2:20 successful 44 0 1 0 0 0

28 3500.00 3/23/16 22:02 successful 57 0 0 0 0 0

29 7500.00 10/7/15 1:12 failed 6 0 0 0 0 1

30 200000.00 7/4/13 11:19 failed 1274 0 0 0 0 0

31 55000.00 6/16/14 6:36 successful 287 0 1 0 0 0

32 10000.00 1/9/12 17:38 successful 153 1 0 0 0 0

33 60000.00 3/30/15 2:47 failed 60 1 0 0 0 0

34 1500.00 9/20/12 1:47 successful 78 0 0 0 0 0

35 700.00 10/26/12 23:10 successful 702 0 0 0 0 0

.data\_Design .data\_Comics .data\_Publishing .data\_Fashion .data\_Theater .data\_Art .data\_Photography .data\_Technology

1 0 0 1 0 0 0 0 0

2 1 0 0 0 0 0 0 0

3 0 0 0 0 0 0 0 0

4 0 0 0 0 1 0 0 0

5 0 0 0 0 0 0 0 0

6 0 0 1 0 0 0 0 0

7 0 0 1 0 0 0 0 0

8 0 0 1 0 0 0 0 0

9 1 0 0 0 0 0 0 0

10 0 0 0 0 0 0 0 0

11 0 0 0 0 0 0 0 0

12 0 0 0 0 0 0 0 0

13 0 0 0 0 0 1 0 0

14 0 0 0 0 0 0 0 0

15 0 0 0 0 0 0 0 0

16 0 0 0 0 0 1 0 0

17 0 0 0 0 0 1 0 0

18 1 0 0 0 0 0 0 0

19 0 0 0 0 1 0 0 0

20 0 0 0 0 0 1 0 0

21 0 0 1 0 0 0 0 0

22 0 0 0 0 0 0 0 0

23 0 0 0 0 0 0 0 0

24 0 0 0 0 0 0 0 0

25 0 0 1 0 0 0 0 0

26 0 0 0 0 0 0 0 0

27 0 0 0 0 0 0 0 0

28 0 0 0 0 1 0 0 0

29 0 0 0 0 0 0 0 0

30 0 0 0 0 0 0 0 1

31 0 0 0 0 0 0 0 0

32 0 0 0 0 0 0 0 0

33 0 0 0 0 0 0 0 0

34 0 1 0 0 0 0 0 0

35 0 0 0 0 0 0 0 1

.data\_Dance .data\_Journalism Season Prj\_Name\_Length Duration Launched\_Year Deadline\_Year bins

1 0 0 Summer 33 30 2012 2012 Fourth

2 0 0 Winter 16 34 2015 2015 Second

3 0 0 Winter 52 27 2016 2016 Seven

4 0 0 Spring 15 32 2012 2012 Second

5 0 0 Summer 45 60 2014 2014 Six

6 0 0 Summer 7 31 2013 2013 First

7 0 0 Fall 54 30 2014 2014 Seven

8 0 0 Winter 54 37 2013 2013 Seven

9 0 0 Spring 20 60 2016 2016 Third

10 0 0 Spring 55 53 2012 2012 Seven

11 0 0 Fall 8 30 2014 2014 First

12 0 1 Summer 57 30 2012 2012 Seven

13 0 0 Fall 46 35 2013 2013 Six

14 0 0 Winter 8 45 2014 2014 First

15 0 0 Fall 17 47 2014 2014 Second

16 0 0 Spring 9 30 2012 2012 First

17 0 0 Winter 18 30 2014 2014 Third

18 0 0 Summer 13 45 2012 2012 Second

19 0 0 Spring 57 35 2015 2015 Seven

20 0 0 Summer 39 29 2013 2013 Five

21 0 0 Spring 19 18 2012 2012 Third

22 1 0 Winter 15 28 2016 2016 Second

23 0 0 Spring 46 30 2014 2014 Six

24 0 0 Fall 51 40 2014 2014 Six

25 0 0 Fall 43 21 2011 2011 Five

26 0 0 Fall 19 25 2012 2012 Third

27 0 0 Spring 50 57 2012 2012 Six

28 0 0 Spring 8 21 2016 2016 First

29 0 0 Fall 54 60 2015 2015 Seven

30 0 0 Summer 38 32 2013 2013 Five

31 0 0 Summer 42 60 2014 2014 Five

32 0 0 Winter 41 45 2012 2012 Five

33 0 0 Spring 3 60 2015 2015 First

34 0 0 Fall 20 21 2012 2012 Third

35 0 0 Fall 33 30 2012 2012 Fourth

[ reached getOption("max.print") -- omitted 19965 rows ]

> summary(Data1)

name main\_category deadline goal launched

#NAME? : 5 Film & Video:3711 6/2/12 5:59 : 6 Min. : 1 3/26/13 20:46: 3

Facade : 2 Music :3229 9/1/10 5:59 : 6 1st Qu.: 2000 8/12/13 22:10: 3

Keys to the City: 2 Publishing :2221 1/1/12 8:59 : 4 Median : 5000 1/10/13 20:46: 2

Music Video : 2 Art :1635 11/1/14 4:59: 4 Mean : 38148 1/14/15 3:01 : 2

My First Film : 2 Games :1486 12/1/14 8:59: 4 3rd Qu.: 15000 1/15/13 16:01: 2

Pangaea : 2 Design :1322 3/1/12 3:00 : 4 Max. :100000000 1/15/15 1:13 : 2

(Other) :19985 (Other) :6396 (Other) :19972 (Other) :19986

state backers .data\_Film...Video .data\_Music .data\_Food .data\_Crafts

failed :11664 Min. : 0.0 Min. :0.0000 Min. :0.0000 Min. :0.0000 Min. :0.0000

successful: 8336 1st Qu.: 2.0 1st Qu.:0.0000 1st Qu.:0.0000 1st Qu.:0.0000 1st Qu.:0.0000

Median : 17.0 Median :0.0000 Median :0.0000 Median :0.0000 Median :0.0000

Mean : 113.2 Mean :0.1855 Mean :0.1615 Mean :0.0656 Mean :0.0232

3rd Qu.: 65.0 3rd Qu.:0.0000 3rd Qu.:0.0000 3rd Qu.:0.0000 3rd Qu.:0.0000

Max. :105857.0 Max. :1.0000 Max. :1.0000 Max. :1.0000 Max. :1.0000

.data\_Games .data\_Design .data\_Comics .data\_Publishing .data\_Fashion .data\_Theater .data\_Art

Min. :0.0000 Min. :0.0000 Min. :0.0000 Min. :0.000 Min. :0.0000 Min. :0.00000 Min. :0.00000

1st Qu.:0.0000 1st Qu.:0.0000 1st Qu.:0.0000 1st Qu.:0.000 1st Qu.:0.0000 1st Qu.:0.00000 1st Qu.:0.00000

Median :0.0000 Median :0.0000 Median :0.0000 Median :0.000 Median :0.0000 Median :0.00000 Median :0.00000

Mean :0.0743 Mean :0.0661 Mean :0.0319 Mean :0.111 Mean :0.0518 Mean :0.03195 Mean :0.08175

3rd Qu.:0.0000 3rd Qu.:0.0000 3rd Qu.:0.0000 3rd Qu.:0.000 3rd Qu.:0.0000 3rd Qu.:0.00000 3rd Qu.:0.00000

Max. :1.0000 Max. :1.0000 Max. :1.0000 Max. :1.000 Max. :1.0000 Max. :1.00000 Max. :1.00000

.data\_Photography .data\_Technology .data\_Dance .data\_Journalism Season Prj\_Name\_Length.Prj\_Name\_Length

Min. :0.00000 Min. :0.0000 Min. :0.00000 Min. :0.00000 Fall :4930 Min. : 1.00000

1st Qu.:0.00000 1st Qu.:0.0000 1st Qu.:0.00000 1st Qu.:0.00000 Spring:5319 1st Qu.:16.00000

Median :0.00000 Median :0.0000 Median :0.00000 Median :0.00000 Summer:5539 Median :29.00000

Mean :0.02845 Mean :0.0627 Mean :0.01265 Mean :0.01155 Winter:4212 Mean :30.87895

3rd Qu.:0.00000 3rd Qu.:0.0000 3rd Qu.:0.00000 3rd Qu.:0.00000 3rd Qu.:46.00000

Max. :1.00000 Max. :1.0000 Max. :1.00000 Max. :1.00000 Max. :85.00000

Duration Launched\_Year Deadline\_Year bins

Min. : 1.0 Min. :2009 Min. :2009 Third :3300

1st Qu.:30.0 1st Qu.:2012 1st Qu.:2012 Five :3066

Median :30.0 Median :2014 Median :2014 Second :2961

Mean :34.5 Mean :2013 Mean :2014 First :2728

3rd Qu.:38.0 3rd Qu.:2015 3rd Qu.:2015 Fourth :2552

Max. :92.0 Max. :2016 Max. :2016 Seven :2397

(Other):2996

> smp\_size <- floor(0.70\*nrow(proj))

> set.seed(123)

> train\_ind <- sample(seq\_len(nrow(proj)), size=smp\_size)

> train <- Data1[train\_ind, ]

> test <- Data1[-train\_ind, ]

> dim(train)

[1] 14000 28

> dim(test)

[1] 6000 28

> library(MASS)

> qda.fit=qda(state ~ main\_category+goal+Season+Launched\_Year+Duration+Deadline\_Year+bins, train)

> qda.fit

Call:

qda(state ~ main\_category + goal + Season + Launched\_Year + Duration +

Deadline\_Year + bins, data = train)

Prior probabilities of groups:

failed successful

0.5848571 0.4151429

Group means:

main\_categoryComics main\_categoryCrafts main\_categoryDance main\_categoryDesign main\_categoryFashion

failed 0.02296043 0.03004397 0.006717147 0.06924768 0.05959941

successful 0.04129387 0.01428080 0.020474880 0.05970406 0.03940124

main\_categoryFilm & Video main\_categoryFood main\_categoryGames main\_categoryJournalism main\_categoryMusic

failed 0.1836834 0.07694187 0.07034685 0.016243283 0.1308012

successful 0.1866827 0.04886442 0.08224363 0.007226428 0.2088782

main\_categoryPhotography main\_categoryPublishing main\_categoryTechnology main\_categoryTheater goal

failed 0.03297509 0.12652662 0.07840743 0.01831949 50520.798

successful 0.02271163 0.08843772 0.04026153 0.05075705 9337.762

SeasonSpring SeasonSummer SeasonWinter Launched\_Year Duration Deadline\_Year binsSecond binsThird binsFourth

failed 0.2641671 0.2805325 0.2149487 2013.664 35.74145 2013.733 0.1606009 0.1653639 0.1212750

successful 0.2713352 0.2646249 0.2064694 2013.244 32.78527 2013.302 0.1305919 0.1637990 0.1383345

binsFive binsSix binsSeven binseight binsnine binsten

failed 0.1373962 0.1069858 0.1133366 0.009159746 0.002076209 0.02283830

successful 0.1720578 0.1290434 0.1297316 0.008258775 0.002236752 0.01892636

> qda.pred=predict(qda.fit, Data1)

> names(qda.pred)

[1] "class" "posterior"

> qda.class=qda.pred$class

> table(qda.class, Data1[,6])

qda.class failed successful

failed 3867 1344

successful 7797 6992

> mean(qda.class==Data1[,6])

[1] 0.54295

> sum(qda.pred$posterior[,1]>=.5)

[1] 5211

> sum(qda.pred$posterior[,1]<.5)

[1] 14789

> qda.pred$posterior[1:20,1]

1 2 3 4 5 6 7 8 9

1.024675e-01 2.161694e-01 5.058497e-03 1.070233e-09 7.509362e-01 4.042487e-01 1.071749e-01 1.431009e-01 4.651675e-01

10 11 12 13 14 15 16 17 18

1.291244e-02 9.999999e-01 1.000000e+00 5.863979e-03 2.216321e-01 3.449279e-02 3.644402e-02 2.356743e-02 1.770602e-01

19 20

1.807517e-06 6.169527e-03

> qda.class[1:20]

[1] successful successful successful successful failed successful successful successful successful successful

[11] failed failed successful successful successful successful successful successful successful successful

Levels: failed successful

> sum(qda.pred$posterior[,1]>.9)

[1] 3059

QDA Cross Validation

> library(MASS)

> library(dplyr)

> Data1 <- read.csv("/Users/muskanjindal/Desktop/kickstarter-projects/proj.csv")

> head(Data1)

name main\_category deadline goal launched state

1 Acting Out Yoga Presents: Anna in Paris Publishing 7/2/12 23:08 1500 6/2/12 23:08 failed

2 Auto Icon Screen Prints Design 3/18/15 1:00 1500 2/12/15 19:20 successful

3 Peter Squires' New 7" Record - Recorded by Steve Albini! Music 2/1/16 3:00 500 1/5/16 20:40 successful

4 Much Ado About Nothing Theater 4/30/12 22:00 6000 3/29/12 15:08 failed

5 Bacon Food 9/9/14 21:18 23 7/11/14 21:18 failed

6 MARLEY WAS DEAD Publishing 8/1/13 19:00 4000 7/1/13 19:00 successful

backers .data\_Film...Video .data\_Music .data\_Food .data\_Crafts .data\_Games .data\_Design .data\_Comics .data\_Publishing

1 0 0 0 0 0 0 0 0 1

2 971 0 0 0 0 0 1 0 0

3 31 0 1 0 0 0 0 0 0

4 9 0 0 0 0 0 0 0 0

5 0 0 0 1 0 0 0 0 0

6 99 0 0 0 0 0 0 0 1

.data\_Fashion .data\_Theater .data\_Art .data\_Photography .data\_Technology .data\_Dance .data\_Journalism Season

1 0 0 0 0 0 0 0 Summer

2 0 0 0 0 0 0 0 Winter

3 0 0 0 0 0 0 0 Winter

4 0 1 0 0 0 0 0 Spring

5 0 0 0 0 0 0 0 Summer

6 0 0 0 0 0 0 0 Summer

Prj\_Name\_Length Duration Launched\_Year Deadline\_Year

1 39 30 2012 2012

2 23 34 2015 2015

3 56 27 2016 2016

4 22 32 2012 2012

5 5 60 2014 2014

6 15 31 2013 2013

> num\_columns <- c('Prj\_Name\_Length')

> Data1[num\_columns] <- sapply(Data1[num\_columns], as.numeric)

> Prj\_Name\_Length<-Data1$Prj\_Name\_Length

> Prj\_Name\_Length

[2,] 16

[3,] 52

[4,] 15

[5,] 45

[6,] 7

[7,] 54

[8,] 54

[9,] 20

[10,] 55

> cut(Prj\_Name\_Length,10)

[1] (26.2,34.6] (9.4,17.8] (51.4,59.8] (9.4,17.8] (43,51.4] (0.916,9.4] (51.4,59.8] (51.4,59.8] (17.8,26.2]

[10] (51.4,59.8] (0.916,9.4] (51.4,59.8] (43,51.4] (0.916,9.4] (9.4,17.8] (0.916,9.4] (17.8,26.2] (9.4,17.8]

[19] (51.4,59.8] (34.6,43] (17.8,26.2] (9.4,17.8] (43,51.4] (43,51.4] (34.6,43] (17.8,26.2] (43,51.4]

[28] (0.916,9.4] (51.4,59.8] (34.6,43] (34.6,43] (34.6,43] (0.916,9.4] (17.8,26.2] (26.2,34.6] (51.4,59.8]

[37] (9.4,17.8] (26.2,34.6] (43,51.4] (17.8,26.2] (0.916,9.4] (51.4,59.8] (9.4,17.8] (26.2,34.6] (51.4,59.8]

[46] (17.8,26.2] (34.6,43] (51.4,59.8] (51.4,59.8] (0.916,9.4] (0.916,9.4] (0.916,9.4] (34.6,43] (34.6,43]

[55] (0.916,9.4] (43,51.4] (43,51.4] (34.6,43] (17.8,26.2] (43,51.4] (51.4,59.8] (17.8,26.2] (17.8,26.2]

[64] (0.916,9.4] (0.916,9.4] (0.916,9.4] (9.4,17.8] (17.8,26.2] (9.4,17.8] (17.8,26.2] (0.916,9.4] (0.916,9.4]

[73] (34.6,43] (17.8,26.2] (26.2,34.6] (34.6,43] (34.6,43] (34.6,43] (17.8,26.2] (43,51.4] (0.916,9.4]

[82] (43,51.4] (51.4,59.8] (34.6,43] (43,51.4] (0.916,9.4] (0.916,9.4] (34.6,43] (26.2,34.6] (26.2,34.6]

[91] (43,51.4] (34.6,43] (26.2,34.6] (51.4,59.8] (51.4,59.8] (9.4,17.8] (17.8,26.2] (34.6,43] (26.2,34.6]

[100] (34.6,43] (34.6,43] (43,51.4] (26.2,34.6] (26.2,34.6] (43,51.4] (26.2,34.6] (17.8,26.2] (26.2,34.6]

[109] (17.8,26.2] (51.4,59.8] (51.4,59.8] (0.916,9.4] (51.4,59.8] (9.4,17.8] (26.2,34.6] (43,51.4] (17.8,26.2]

[118] (26.2,34.6] (17.8,26.2] (17.8,26.2] (17.8,26.2] (51.4,59.8] (0.916,9.4] (17.8,26.2] (34.6,43] (51.4,59.8]

[127] (17.8,26.2] (17.8,26.2] (9.4,17.8] (17.8,26.2] (34.6,43] (34.6,43] (43,51.4] (51.4,59.8] (43,51.4]

[136] (26.2,34.6] (26.2,34.6] (34.6,43] (34.6,43] (59.8,68.2] (9.4,17.8] (26.2,34.6] (9.4,17.8] (9.4,17.8]

[145] (26.2,34.6] (26.2,34.6] (9.4,17.8] (0.916,9.4] (26.2,34.6] (0.916,9.4] (0.916,9.4] (34.6,43] (0.916,9.4]

[154] (51.4,59.8] (51.4,59.8] (26.2,34.6] (34.6,43] (17.8,26.2] (34.6,43] (17.8,26.2] (26.2,34.6] (43,51.4]

[163] (0.916,9.4] (51.4,59.8] (9.4,17.8] (0.916,9.4] (0.916,9.4] (26.2,34.6] (17.8,26.2] (17.8,26.2] (0.916,9.4]

[172] (26.2,34.6] (0.916,9.4] (9.4,17.8] (9.4,17.8] (34.6,43] (26.2,34.6] (51.4,59.8] (34.6,43] (0.916,9.4]

[181] (9.4,17.8] (59.8,68.2] (9.4,17.8] (17.8,26.2] (51.4,59.8] (17.8,26.2] (34.6,43] (26.2,34.6] (9.4,17.8]

[190] (51.4,59.8] (26.2,34.6] (0.916,9.4] (34.6,43] (34.6,43] (0.916,9.4] (43,51.4] (9.4,17.8] (9.4,17.8]

[199] (59.8,68.2] (0.916,9.4] (51.4,59.8] (51.4,59.8] (17.8,26.2] (0.916,9.4] (17.8,26.2] (34.6,43] (43,51.4]

[208] (17.8,26.2] (17.8,26.2] (0.916,9.4] (26.2,34.6] (9.4,17.8] (9.4,17.8] (26.2,34.6] (17.8,26.2] (34.6,43]

[217] (26.2,34.6] (17.8,26.2] (51.4,59.8] (43,51.4] (34.6,43] (0.916,9.4] (34.6,43] (34.6,43] (51.4,59.8]

[226] (26.2,34.6] (9.4,17.8] (17.8,26.2] (17.8,26.2] (9.4,17.8] (43,51.4] (51.4,59.8] (0.916,9.4] (0.916,9.4]

[235] (0.916,9.4] (34.6,43] (26.2,34.6] (17.8,26.2] (34.6,43] (0.916,9.4] (0.916,9.4] (34.6,43] (43,51.4]

[244] (9.4,17.8] (34.6,43] (43,51.4] (34.6,43] (34.6,43] (34.6,43] (76.6,85.1] (26.2,34.6] (17.8,26.2]

[253] (9.4,17.8] (17.8,26.2] (43,51.4] (34.6,43] (34.6,43] (9.4,17.8] (43,51.4] (51.4,59.8] (76.6,85.1]

[262] (17.8,26.2] (0.916,9.4] (34.6,43] (34.6,43] (9.4,17.8] (17.8,26.2] (17.8,26.2] (51.4,59.8] (9.4,17.8]

[271] (0.916,9.4] (9.4,17.8] (0.916,9.4] (51.4,59.8] (17.8,26.2] (17.8,26.2] (43,51.4] (51.4,59.8] (26.2,34.6]

[280] (51.4,59.8] (0.916,9.4] (34.6,43] (0.916,9.4] (17.8,26.2] (17.8,26.2] (26.2,34.6] (51.4,59.8] (43,51.4]

[289] (17.8,26.2] (0.916,9.4] (43,51.4] (26.2,34.6] (34.6,43] (17.8,26.2] (0.916,9.4] (51.4,59.8] (17.8,26.2]

[298] (51.4,59.8] (51.4,59.8] (26.2,34.6] (26.2,34.6] (9.4,17.8] (26.2,34.6] (9.4,17.8] (9.4,17.8] (26.2,34.6]

[307] (43,51.4] (51.4,59.8] (43,51.4] (34.6,43] (17.8,26.2] (26.2,34.6] (17.8,26.2] (26.2,34.6] (26.2,34.6]

[316] (43,51.4] (51.4,59.8] (17.8,26.2] (0.916,9.4] (17.8,26.2] (17.8,26.2] (26.2,34.6] (43,51.4] (26.2,34.6]

[325] (43,51.4] (17.8,26.2] (17.8,26.2] (34.6,43] (76.6,85.1] (17.8,26.2] (0.916,9.4] (9.4,17.8] (34.6,43]

[334] (26.2,34.6] (43,51.4] (9.4,17.8] (9.4,17.8] (26.2,34.6] (26.2,34.6] (34.6,43] (51.4,59.8] (9.4,17.8]

[343] (34.6,43] (59.8,68.2] (17.8,26.2] (0.916,9.4] (43,51.4] (17.8,26.2] (9.4,17.8] (26.2,34.6] (17.8,26.2]

[352] (0.916,9.4] (17.8,26.2] (17.8,26.2] (51.4,59.8] (9.4,17.8] (0.916,9.4] (26.2,34.6] (26.2,34.6] (34.6,43]

[361] (0.916,9.4] (43,51.4] (0.916,9.4] (43,51.4] (43,51.4] (43,51.4] (0.916,9.4] (0.916,9.4] (17.8,26.2]

[370] (17.8,26.2] (51.4,59.8] (43,51.4] (17.8,26.2] (0.916,9.4] (51.4,59.8] (9.4,17.8] (34.6,43] (43,51.4]

[379] (17.8,26.2] (0.916,9.4] (51.4,59.8] (26.2,34.6] (51.4,59.8] (9.4,17.8] (51.4,59.8] (34.6,43] (9.4,17.8]

[388] (17.8,26.2] (17.8,26.2] (9.4,17.8] (34.6,43] (9.4,17.8] (43,51.4] (0.916,9.4] (51.4,59.8] (51.4,59.8]

[397] (0.916,9.4] (26.2,34.6] (17.8,26.2] (34.6,43] (51.4,59.8] (51.4,59.8] (9.4,17.8] (0.916,9.4] (43,51.4]

[406] (17.8,26.2] (17.8,26.2] (76.6,85.1] (68.2,76.6] (9.4,17.8] (26.2,34.6] (17.8,26.2] (34.6,43] (43,51.4]

[415] (51.4,59.8] (26.2,34.6] (34.6,43] (0.916,9.4] (9.4,17.8] (34.6,43] (34.6,43] (17.8,26.2] (51.4,59.8]

[424] (34.6,43] (9.4,17.8] (43,51.4] (43,51.4] (51.4,59.8] (43,51.4] (0.916,9.4] (51.4,59.8] (34.6,43]

[433] (51.4,59.8] (43,51.4] (34.6,43] (43,51.4] (9.4,17.8] (9.4,17.8] (9.4,17.8] (0.916,9.4] (9.4,17.8]

[442] (26.2,34.6] (26.2,34.6] (9.4,17.8] (43,51.4] (0.916,9.4] (9.4,17.8] (26.2,34.6] (17.8,26.2] (17.8,26.2]

[451] (17.8,26.2] (17.8,26.2] (34.6,43] (43,51.4] (9.4,17.8] (0.916,9.4] (26.2,34.6] (43,51.4] (51.4,59.8]

[460] (9.4,17.8] (51.4,59.8] (0.916,9.4] (17.8,26.2] (34.6,43] (51.4,59.8] (9.4,17.8] (17.8,26.2] (0.916,9.4]

[469] (76.6,85.1] (9.4,17.8] (43,51.4] (9.4,17.8] (51.4,59.8] (17.8,26.2] (26.2,34.6] (68.2,76.6] (17.8,26.2]

[478] (43,51.4] (9.4,17.8] (9.4,17.8] (51.4,59.8] (0.916,9.4] (9.4,17.8] (43,51.4] (26.2,34.6] (76.6,85.1]

[487] (51.4,59.8] (0.916,9.4] (51.4,59.8] (0.916,9.4] (9.4,17.8] (0.916,9.4] (43,51.4] (9.4,17.8] (9.4,17.8]

[496] (0.916,9.4] (51.4,59.8] (51.4,59.8] (17.8,26.2] (17.8,26.2] (0.916,9.4] (17.8,26.2] (26.2,34.6] (43,51.4]

[505] (43,51.4] (17.8,26.2] (76.6,85.1] (51.4,59.8] (51.4,59.8] (17.8,26.2] (9.4,17.8] (17.8,26.2] (0.916,9.4]

[514] (9.4,17.8] (43,51.4] (34.6,43] (43,51.4] (0.916,9.4] (26.2,34.6] (17.8,26.2] (43,51.4] (43,51.4]

[523] (51.4,59.8] (9.4,17.8] (26.2,34.6] (43,51.4] (34.6,43] (34.6,43] (26.2,34.6] (0.916,9.4] (26.2,34.6]

[532] (9.4,17.8] (26.2,34.6] (9.4,17.8] (17.8,26.2] (9.4,17.8] (43,51.4] (59.8,68.2] (51.4,59.8] (51.4,59.8]

[541] (26.2,34.6] (26.2,34.6] (0.916,9.4] (17.8,26.2] (0.916,9.4] (17.8,26.2] (34.6,43] (51.4,59.8] (26.2,34.6]

[550] (51.4,59.8] (26.2,34.6] (34.6,43] (34.6,43] (26.2,34.6] (9.4,17.8] (9.4,17.8] (34.6,43] (9.4,17.8]

[559] (43,51.4] (9.4,17.8] (9.4,17.8] (43,51.4] (0.916,9.4] (0.916,9.4] (34.6,43] (34.6,43] (17.8,26.2]

[568] (17.8,26.2] (43,51.4] (51.4,59.8] (17.8,26.2] (43,51.4] (51.4,59.8] (26.2,34.6] (17.8,26.2] (9.4,17.8]

[577] (0.916,9.4] (26.2,34.6] (43,51.4] (0.916,9.4] (51.4,59.8] (17.8,26.2] (0.916,9.4] (17.8,26.2] (17.8,26.2]

[586] (51.4,59.8] (17.8,26.2] (43,51.4] (43,51.4] (9.4,17.8] (17.8,26.2] (34.6,43] (26.2,34.6] (26.2,34.6]

[595] (34.6,43] (51.4,59.8] (0.916,9.4] (34.6,43] (0.916,9.4] (17.8,26.2] (34.6,43] (43,51.4] (26.2,34.6]

[604] (51.4,59.8] (34.6,43] (17.8,26.2] (26.2,34.6] (34.6,43] (34.6,43] (34.6,43] (9.4,17.8] (0.916,9.4]

[613] (17.8,26.2] (9.4,17.8] (43,51.4] (9.4,17.8] (17.8,26.2] (51.4,59.8] (9.4,17.8] (34.6,43] (0.916,9.4]

[622] (0.916,9.4] (34.6,43] (51.4,59.8] (0.916,9.4] (17.8,26.2] (17.8,26.2] (43,51.4] (51.4,59.8] (17.8,26.2]

[631] (17.8,26.2] (26.2,34.6] (9.4,17.8] (43,51.4] (51.4,59.8] (0.916,9.4] (17.8,26.2] (43,51.4] (0.916,9.4]

[640] (51.4,59.8] (9.4,17.8] (0.916,9.4] (43,51.4] (34.6,43] (9.4,17.8] (17.8,26.2] (9.4,17.8] (43,51.4]

[649] (26.2,34.6] (0.916,9.4] (17.8,26.2] (34.6,43] (51.4,59.8] (17.8,26.2] (43,51.4] (0.916,9.4] (51.4,59.8]

[658] (17.8,26.2] (17.8,26.2] (51.4,59.8] (51.4,59.8] (43,51.4] (17.8,26.2] (43,51.4] (26.2,34.6] (17.8,26.2]

[667] (59.8,68.2] (17.8,26.2] (43,51.4] (9.4,17.8] (9.4,17.8] (34.6,43] (0.916,9.4] (17.8,26.2] (43,51.4]

[676] (51.4,59.8] (17.8,26.2] (9.4,17.8] (0.916,9.4] (9.4,17.8] (0.916,9.4] (9.4,17.8] (43,51.4] (76.6,85.1]

[685] (0.916,9.4] (17.8,26.2] (43,51.4] (34.6,43] (9.4,17.8] (43,51.4] (0.916,9.4] (17.8,26.2] (34.6,43]

[694] (34.6,43] (9.4,17.8] (51.4,59.8] (43,51.4] (9.4,17.8] (26.2,34.6] (17.8,26.2] (9.4,17.8] (34.6,43]

[703] (9.4,17.8] (17.8,26.2] (9.4,17.8] (43,51.4] (43,51.4] (17.8,26.2] (43,51.4] (51.4,59.8] (34.6,43]

[712] (34.6,43] (0.916,9.4] (43,51.4] (34.6,43] (0.916,9.4] (17.8,26.2] (0.916,9.4] (34.6,43] (76.6,85.1]

[721] (51.4,59.8] (17.8,26.2] (9.4,17.8] (17.8,26.2] (43,51.4] (9.4,17.8] (34.6,43] (34.6,43] (0.916,9.4]

[730] (34.6,43] (51.4,59.8] (0.916,9.4] (34.6,43] (68.2,76.6] (0.916,9.4] (9.4,17.8] (34.6,43] (0.916,9.4]

[739] (51.4,59.8] (34.6,43] (26.2,34.6] (0.916,9.4] (43,51.4] (34.6,43] (34.6,43] (26.2,34.6] (76.6,85.1]

[748] (34.6,43] (51.4,59.8] (34.6,43] (26.2,34.6] (9.4,17.8] (26.2,34.6] (17.8,26.2] (0.916,9.4] (51.4,59.8]

[757] (9.4,17.8] (0.916,9.4] (51.4,59.8] (0.916,9.4] (0.916,9.4] (9.4,17.8] (51.4,59.8] (0.916,9.4] (9.4,17.8]

[766] (34.6,43] (68.2,76.6] (9.4,17.8] (9.4,17.8] (9.4,17.8] (17.8,26.2] (34.6,43] (34.6,43] (51.4,59.8]

[775] (76.6,85.1] (43,51.4] (0.916,9.4] (9.4,17.8] (0.916,9.4] (17.8,26.2] (0.916,9.4] (17.8,26.2] (34.6,43]

[784] (0.916,9.4] (43,51.4] (0.916,9.4] (51.4,59.8] (34.6,43] (43,51.4] (43,51.4] (9.4,17.8] (0.916,9.4]

[793] (17.8,26.2] (9.4,17.8] (26.2,34.6] (51.4,59.8] (34.6,43] (9.4,17.8] (51.4,59.8] (34.6,43] (34.6,43]

[802] (9.4,17.8] (34.6,43] (59.8,68.2] (26.2,34.6] (51.4,59.8] (0.916,9.4] (51.4,59.8] (51.4,59.8] (17.8,26.2]

[811] (9.4,17.8] (51.4,59.8] (17.8,26.2] (0.916,9.4] (9.4,17.8] (26.2,34.6] (34.6,43] (26.2,34.6] (26.2,34.6]

[820] (51.4,59.8] (26.2,34.6] (26.2,34.6] (17.8,26.2] (26.2,34.6] (51.4,59.8] (0.916,9.4] (76.6,85.1] (43,51.4]

[829] (51.4,59.8] (17.8,26.2] (17.8,26.2] (34.6,43] (17.8,26.2] (26.2,34.6] (0.916,9.4] (17.8,26.2] (9.4,17.8]

[838] (34.6,43] (34.6,43] (76.6,85.1] (26.2,34.6] (17.8,26.2] (43,51.4] (9.4,17.8] (34.6,43] (9.4,17.8]

[847] (17.8,26.2] (51.4,59.8] (17.8,26.2] (0.916,9.4] (51.4,59.8] (34.6,43] (43,51.4] (0.916,9.4] (0.916,9.4]

[856] (34.6,43] (0.916,9.4] (26.2,34.6] (51.4,59.8] (26.2,34.6] (17.8,26.2] (0.916,9.4] (51.4,59.8] (43,51.4]

[865] (43,51.4] (17.8,26.2] (0.916,9.4] (51.4,59.8] (51.4,59.8] (34.6,43] (26.2,34.6] (17.8,26.2] (9.4,17.8]

[874] (26.2,34.6] (0.916,9.4] (43,51.4] (9.4,17.8] (51.4,59.8] (17.8,26.2] (26.2,34.6] (17.8,26.2] (9.4,17.8]

[883] (9.4,17.8] (43,51.4] (9.4,17.8] (17.8,26.2] (17.8,26.2] (9.4,17.8] (0.916,9.4] (17.8,26.2] (17.8,26.2]

[892] (0.916,9.4] (26.2,34.6] (9.4,17.8] (26.2,34.6] (34.6,43] (34.6,43] (17.8,26.2] (9.4,17.8] (0.916,9.4]

[901] (43,51.4] (9.4,17.8] (43,51.4] (9.4,17.8] (34.6,43] (9.4,17.8] (43,51.4] (51.4,59.8] (34.6,43]

[910] (59.8,68.2] (34.6,43] (43,51.4] (43,51.4] (51.4,59.8] (34.6,43] (34.6,43] (51.4,59.8] (51.4,59.8]

[919] (34.6,43] (34.6,43] (34.6,43] (0.916,9.4] (17.8,26.2] (0.916,9.4] (43,51.4] (34.6,43] (17.8,26.2]

[928] (9.4,17.8] (51.4,59.8] (0.916,9.4] (17.8,26.2] (26.2,34.6] (0.916,9.4] (76.6,85.1] (43,51.4] (26.2,34.6]

[937] (0.916,9.4] (51.4,59.8] (0.916,9.4] (34.6,43] (0.916,9.4] (34.6,43] (51.4,59.8] (17.8,26.2] (9.4,17.8]

[946] (17.8,26.2] (17.8,26.2] (26.2,34.6] (0.916,9.4] (26.2,34.6] (26.2,34.6] (26.2,34.6] (34.6,43] (17.8,26.2]

[955] (43,51.4] (51.4,59.8] (0.916,9.4] (51.4,59.8] (0.916,9.4] (0.916,9.4] (17.8,26.2] (43,51.4] (17.8,26.2]

[964] (17.8,26.2] (43,51.4] (51.4,59.8] (51.4,59.8] (9.4,17.8] (76.6,85.1] (26.2,34.6] (43,51.4] (26.2,34.6]

[973] (34.6,43] (26.2,34.6] (43,51.4] (26.2,34.6] (34.6,43] (26.2,34.6] (51.4,59.8] (9.4,17.8] (0.916,9.4]

[982] (17.8,26.2] (51.4,59.8] (0.916,9.4] (0.916,9.4] (26.2,34.6] (34.6,43] (17.8,26.2] (34.6,43] (51.4,59.8]

[991] (0.916,9.4] (0.916,9.4] (0.916,9.4] (43,51.4] (0.916,9.4] (0.916,9.4] (9.4,17.8] (34.6,43] (34.6,43]

[1000] (26.2,34.6]

[ reached getOption("max.print") -- omitted 19000 entries ]

10 Levels: (0.916,9.4] (9.4,17.8] (17.8,26.2] (26.2,34.6] (34.6,43] (43,51.4] (51.4,59.8] (59.8,68.2] ... (76.6,85.1]

> cut(Prj\_Name\_Length,10,labels=c("First","Second","Third","Fourth","Five","Six","Seven","eight","nine","ten"))

[1] Fourth Second Seven Second Six First Seven Seven Third Seven First Seven Six First Second First

[17] Third Second Seven Five Third Second Six Six Five Third Six First Seven Five Five Five

[33] First Third Fourth Seven Second Fourth Six Third First Seven Second Fourth Seven Third Five Seven

[49] Seven First First First Five Five First Six Six Five Third Six Seven Third Third First

[65] First First Second Third Second Third First First Five Third Fourth Five Five Five Third Six

[81] First Six Seven Five Six First First Five Fourth Fourth Six Five Fourth Seven Seven Second

[97] Third Five Fourth Five Five Six Fourth Fourth Six Fourth Third Fourth Third Seven Seven First

[113] Seven Second Fourth Six Third Fourth Third Third Third Seven First Third Five Seven Third Third

[129] Second Third Five Five Six Seven Six Fourth Fourth Five Five eight Second Fourth Second Second

[145] Fourth Fourth Second First Fourth First First Five First Seven Seven Fourth Five Third Five Third

[161] Fourth Six First Seven Second First First Fourth Third Third First Fourth First Second Second Five

[177] Fourth Seven Five First Second eight Second Third Seven Third Five Fourth Second Seven Fourth First

[193] Five Five First Six Second Second eight First Seven Seven Third First Third Five Six Third

[209] Third First Fourth Second Second Fourth Third Five Fourth Third Seven Six Five First Five Five

[225] Seven Fourth Second Third Third Second Six Seven First First First Five Fourth Third Five First

[241] First Five Six Second Five Six Five Five Five ten Fourth Third Second Third Six Five

[257] Five Second Six Seven ten Third First Five Five Second Third Third Seven Second First Second

[273] First Seven Third Third Six Seven Fourth Seven First Five First Third Third Fourth Seven Six

[289] Third First Six Fourth Five Third First Seven Third Seven Seven Fourth Fourth Second Fourth Second

[305] Second Fourth Six Seven Six Five Third Fourth Third Fourth Fourth Six Seven Third First Third

[321] Third Fourth Six Fourth Six Third Third Five ten Third First Second Five Fourth Six Second

[337] Second Fourth Fourth Five Seven Second Five eight Third First Six Third Second Fourth Third First

[353] Third Third Seven Second First Fourth Fourth Five First Six First Six Six Six First First

[369] Third Third Seven Six Third First Seven Second Five Six Third First Seven Fourth Seven Second

[385] Seven Five Second Third Third Second Five Second Six First Seven Seven First Fourth Third Five

[401] Seven Seven Second First Six Third Third ten nine Second Fourth Third Five Six Seven Fourth

[417] Five First Second Five Five Third Seven Five Second Six Six Seven Six First Seven Five

[433] Seven Six Five Six Second Second Second First Second Fourth Fourth Second Six First Second Fourth

[449] Third Third Third Third Five Six Second First Fourth Six Seven Second Seven First Third Five

[465] Seven Second Third First ten Second Six Second Seven Third Fourth nine Third Six Second Second

[481] Seven First Second Six Fourth ten Seven First Seven First Second First Six Second Second First

[497] Seven Seven Third Third First Third Fourth Six Six Third ten Seven Seven Third Second Third

[513] First Second Six Five Six First Fourth Third Six Six Seven Second Fourth Six Five Five

[529] Fourth First Fourth Second Fourth Second Third Second Six eight Seven Seven Fourth Fourth First Third

[545] First Third Five Seven Fourth Seven Fourth Five Five Fourth Second Second Five Second Six Second

[561] Second Six First First Five Five Third Third Six Seven Third Six Seven Fourth Third Second

[577] First Fourth Six First Seven Third First Third Third Seven Third Six Six Second Third Five

[593] Fourth Fourth Five Seven First Five First Third Five Six Fourth Seven Five Third Fourth Five

[609] Five Five Second First Third Second Six Second Third Seven Second Five First First Five Seven

[625] First Third Third Six Seven Third Third Fourth Second Six Seven First Third Six First Seven

[641] Second First Six Five Second Third Second Six Fourth First Third Five Seven Third Six First

[657] Seven Third Third Seven Seven Six Third Six Fourth Third eight Third Six Second Second Five

[673] First Third Six Seven Third Second First Second First Second Six ten First Third Six Five

[689] Second Six First Third Five Five Second Seven Six Second Fourth Third Second Five Second Third

[705] Second Six Six Third Six Seven Five Five First Six Five First Third First Five ten

[721] Seven Third Second Third Six Second Five Five First Five Seven First Five nine First Second

[737] Five First Seven Five Fourth First Six Five Five Fourth ten Five Seven Five Fourth Second

[753] Fourth Third First Seven Second First Seven First First Second Seven First Second Five nine Second

[769] Second Second Third Five Five Seven ten Six First Second First Third First Third Five First

[785] Six First Seven Five Six Six Second First Third Second Fourth Seven Five Second Seven Five

[801] Five Second Five eight Fourth Seven First Seven Seven Third Second Seven Third First Second Fourth

[817] Five Fourth Fourth Seven Fourth Fourth Third Fourth Seven First ten Six Seven Third Third Five

[833] Third Fourth First Third Second Five Five ten Fourth Third Six Second Five Second Third Seven

[849] Third First Seven Five Six First First Five First Fourth Seven Fourth Third First Seven Six

[865] Six Third First Seven Seven Five Fourth Third Second Fourth First Six Second Seven Third Fourth

[881] Third Second Second Six Second Third Third Second First Third Third First Fourth Second Fourth Five

[897] Five Third Second First Six Second Six Second Five Second Six Seven Five eight Five Six

[913] Six Seven Five Five Seven Seven Five Five Five First Third First Six Five Third Second

[929] Seven First Third Fourth First ten Six Fourth First Seven First Five First Five Seven Third

[945] Second Third Third Fourth First Fourth Fourth Fourth Five Third Six Seven First Seven First First

[961] Third Six Third Third Six Seven Seven Second ten Fourth Six Fourth Five Fourth Six Fourth

[977] Five Fourth Seven Second First Third Seven First First Fourth Five Third Five Seven First First

[993] First Six First First Second Five Five Fourth

[ reached getOption("max.print") -- omitted 19000 entries ]

Levels: First Second Third Fourth Five Six Seven eight nine ten

> Data1$bins<-cut(Prj\_Name\_Length,10,labels=c("First","Second","Third","Fourth","Five","Six","Seven","eight","nine","ten"))

> Data1

name main\_category deadline

1 Acting Out Yoga Presents: Anna in Paris Publishing 7/2/12 23:08

2 Auto Icon Screen Prints Design 3/18/15 1:00

3 Peter Squires' New 7" Record - Recorded by Steve Albini! Music 2/1/16 3:00

4 Much Ado About Nothing Theater 4/30/12 22:00

5 Bacon Food 9/9/14 21:18

6 MARLEY WAS DEAD Publishing 8/1/13 19:00

7 Hip-Hop Script - Rhyming Prose in Poetic Storytelling Form Publishing 10/30/14 21:58

8 They All Fall Down: Book and Music Inspired by True Events Publishing 3/15/13 4:59

9 Power outage survival stove Design 6/7/16 17:07

10 Po-Rum-Bo - A card matching game with an intersecting twist Games 5/29/12 3:00

11 Go F#@D yourself Crafts 11/7/14 0:11

12 Launch Franklin Home Page: The Go To Place for Franklin News Journalism 8/31/12 1:38

13 The First (Ever!) Buffalo Cherry Blossom Festival! Art 12/31/13 21:15

14 Cookie Dunk Dunk Games 4/5/14 16:14

15 RiverRock Music Festival Music 11/3/14 6:00

16 Heroes Everywhere Art 6/6/12 22:31

17 High Voltage Image Making Art 3/26/14 16:33

18 CMYK 4 Poster Series Design 7/19/12 22:35

19 Forensics Forever!- Committed to performing arts excellence! Theater 5/25/15 18:46

20 Nuanced Concrete: Postcards from Apocalypses Art 8/30/13 3:10

21 Never Let the Right One Go Publishing 3/24/12 5:00

22 Joseph & Maka's Studio Dance 3/19/16 21:23

23 Sit Stay Ride: The Story of America's Sidecar Dogs Film & Video 4/4/14 19:08

24 A song to End Slavery. For the FreeWorld 2015 Campaign. Music 10/13/14 7:00

25 Home Grown Books: Fine Art for Beginning Readers Publishing 11/28/11 16:38

26 ParaNova (a neo-noir film) Film & Video 10/23/12 5:59

27 New Album: BRICK AND MORTAR. New Book: HITLESS WONDER. Music 5/11/12 17:47

28 A Hand of Talons Theater 4/13/16 23:02

29 Linknotize, Fund Us and Help Cure Internet Hole Addiction! Games 12/6/15 1:12

30 CAT: A Thruster for Interplanetary CubeSats Technology 8/5/13 23:00

31 These Grey Men: Album and Tour by John Dolmayan Music 8/15/14 6:36

32 LANA - A Short Film Directed By Berman Fenelus Film & Video 2/23/12 17:38

33 UnBorn Hero Film & Video 5/29/15 2:47

34 Destiny's Fate - Round Two! Comics 10/11/12 18:00

35 Learn Game Programming (codeschool.org) Technology 11/25/12 23:10

goal launched state backers .data\_Film...Video .data\_Music .data\_Food .data\_Crafts .data\_Games

1 1500.00 6/2/12 23:08 failed 0 0 0 0 0 0

2 1500.00 2/12/15 19:20 successful 971 0 0 0 0 0

3 500.00 1/5/16 20:40 successful 31 0 1 0 0 0

4 6000.00 3/29/12 15:08 failed 9 0 0 0 0 0

5 23.00 7/11/14 21:18 failed 0 0 0 1 0 0

6 4000.00 7/1/13 19:00 successful 99 0 0 0 0 0

7 2000.00 9/30/14 22:58 failed 1 0 0 0 0 0

8 6000.00 2/6/13 6:07 successful 113 0 0 0 0 0

9 80000.00 4/8/16 17:07 failed 5 0 0 0 0 0

10 10000.00 4/6/12 15:05 failed 33 0 0 0 0 1

11 200.00 10/8/14 0:11 failed 1 0 0 0 1 0

12 10000.00 8/1/12 1:38 failed 13 0 0 0 0 0

13 5000.00 11/26/13 19:56 successful 108 0 0 0 0 0

14 56000.00 2/19/14 16:14 failed 65 0 0 0 0 1

15 25000.00 9/17/14 20:21 failed 5 0 1 0 0 0

16 5000.00 5/7/12 22:31 failed 5 0 0 0 0 0

17 5000.00 2/24/14 17:33 successful 525 0 0 0 0 0

18 750.00 6/4/12 22:35 failed 16 0 0 0 0 0

19 150000.00 4/20/15 18:46 failed 1 0 0 0 0 0

20 307.00 8/1/13 3:10 failed 12 0 0 0 0 0

21 1000.00 3/6/12 19:24 failed 14 0 0 0 0 0

22 7000.00 2/20/16 8:36 failed 37 0 0 0 0 0

23 28000.00 3/5/14 19:08 successful 679 1 0 0 0 0

24 3900.00 9/3/14 5:09 failed 20 0 1 0 0 0

25 7500.00 11/7/11 16:38 successful 80 0 0 0 0 0

26 14500.00 9/28/12 18:21 failed 0 1 0 0 0 0

27 5000.00 3/15/12 2:20 successful 44 0 1 0 0 0

28 3500.00 3/23/16 22:02 successful 57 0 0 0 0 0

29 7500.00 10/7/15 1:12 failed 6 0 0 0 0 1

30 200000.00 7/4/13 11:19 failed 1274 0 0 0 0 0

31 55000.00 6/16/14 6:36 successful 287 0 1 0 0 0

32 10000.00 1/9/12 17:38 successful 153 1 0 0 0 0

33 60000.00 3/30/15 2:47 failed 60 1 0 0 0 0

34 1500.00 9/20/12 1:47 successful 78 0 0 0 0 0

35 700.00 10/26/12 23:10 successful 702 0 0 0 0 0

.data\_Design .data\_Comics .data\_Publishing .data\_Fashion .data\_Theater .data\_Art .data\_Photography .data\_Technology

1 0 0 1 0 0 0 0 0

2 1 0 0 0 0 0 0 0

3 0 0 0 0 0 0 0 0

4 0 0 0 0 1 0 0 0

5 0 0 0 0 0 0 0 0

6 0 0 1 0 0 0 0 0

7 0 0 1 0 0 0 0 0

8 0 0 1 0 0 0 0 0

9 1 0 0 0 0 0 0 0

10 0 0 0 0 0 0 0 0

11 0 0 0 0 0 0 0 0

12 0 0 0 0 0 0 0 0

13 0 0 0 0 0 1 0 0

14 0 0 0 0 0 0 0 0

15 0 0 0 0 0 0 0 0

16 0 0 0 0 0 1 0 0

17 0 0 0 0 0 1 0 0

18 1 0 0 0 0 0 0 0

19 0 0 0 0 1 0 0 0

20 0 0 0 0 0 1 0 0

21 0 0 1 0 0 0 0 0

22 0 0 0 0 0 0 0 0

23 0 0 0 0 0 0 0 0

24 0 0 0 0 0 0 0 0

25 0 0 1 0 0 0 0 0

26 0 0 0 0 0 0 0 0

27 0 0 0 0 0 0 0 0

28 0 0 0 0 1 0 0 0

29 0 0 0 0 0 0 0 0

30 0 0 0 0 0 0 0 1

31 0 0 0 0 0 0 0 0

32 0 0 0 0 0 0 0 0

33 0 0 0 0 0 0 0 0

34 0 1 0 0 0 0 0 0

35 0 0 0 0 0 0 0 1

.data\_Dance .data\_Journalism Season Prj\_Name\_Length Duration Launched\_Year Deadline\_Year bins

1 0 0 Summer 33 30 2012 2012 Fourth

2 0 0 Winter 16 34 2015 2015 Second

3 0 0 Winter 52 27 2016 2016 Seven

4 0 0 Spring 15 32 2012 2012 Second

5 0 0 Summer 45 60 2014 2014 Six

6 0 0 Summer 7 31 2013 2013 First

7 0 0 Fall 54 30 2014 2014 Seven

8 0 0 Winter 54 37 2013 2013 Seven

9 0 0 Spring 20 60 2016 2016 Third

10 0 0 Spring 55 53 2012 2012 Seven

11 0 0 Fall 8 30 2014 2014 First

12 0 1 Summer 57 30 2012 2012 Seven

13 0 0 Fall 46 35 2013 2013 Six

14 0 0 Winter 8 45 2014 2014 First

15 0 0 Fall 17 47 2014 2014 Second

16 0 0 Spring 9 30 2012 2012 First

17 0 0 Winter 18 30 2014 2014 Third

18 0 0 Summer 13 45 2012 2012 Second

19 0 0 Spring 57 35 2015 2015 Seven

20 0 0 Summer 39 29 2013 2013 Five

21 0 0 Spring 19 18 2012 2012 Third

22 1 0 Winter 15 28 2016 2016 Second

23 0 0 Spring 46 30 2014 2014 Six

24 0 0 Fall 51 40 2014 2014 Six

25 0 0 Fall 43 21 2011 2011 Five

26 0 0 Fall 19 25 2012 2012 Third

27 0 0 Spring 50 57 2012 2012 Six

28 0 0 Spring 8 21 2016 2016 First

29 0 0 Fall 54 60 2015 2015 Seven

30 0 0 Summer 38 32 2013 2013 Five

31 0 0 Summer 42 60 2014 2014 Five

32 0 0 Winter 41 45 2012 2012 Five

33 0 0 Spring 3 60 2015 2015 First

34 0 0 Fall 20 21 2012 2012 Third

35 0 0 Fall 33 30 2012 2012 Fourth

[ reached getOption("max.print") -- omitted 19965 rows ]

> summary(Data1)

name main\_category deadline goal launched

#NAME? : 5 Film & Video:3711 6/2/12 5:59 : 6 Min. : 1 3/26/13 20:46: 3

Facade : 2 Music :3229 9/1/10 5:59 : 6 1st Qu.: 2000 8/12/13 22:10: 3

Keys to the City: 2 Publishing :2221 1/1/12 8:59 : 4 Median : 5000 1/10/13 20:46: 2

Music Video : 2 Art :1635 11/1/14 4:59: 4 Mean : 38148 1/14/15 3:01 : 2

My First Film : 2 Games :1486 12/1/14 8:59: 4 3rd Qu.: 15000 1/15/13 16:01: 2

Pangaea : 2 Design :1322 3/1/12 3:00 : 4 Max. :100000000 1/15/15 1:13 : 2

(Other) :19985 (Other) :6396 (Other) :19972 (Other) :19986

state backers .data\_Film...Video .data\_Music .data\_Food .data\_Crafts

failed :11664 Min. : 0.0 Min. :0.0000 Min. :0.0000 Min. :0.0000 Min. :0.0000

successful: 8336 1st Qu.: 2.0 1st Qu.:0.0000 1st Qu.:0.0000 1st Qu.:0.0000 1st Qu.:0.0000

Median : 17.0 Median :0.0000 Median :0.0000 Median :0.0000 Median :0.0000

Mean : 113.2 Mean :0.1855 Mean :0.1615 Mean :0.0656 Mean :0.0232

3rd Qu.: 65.0 3rd Qu.:0.0000 3rd Qu.:0.0000 3rd Qu.:0.0000 3rd Qu.:0.0000

Max. :105857.0 Max. :1.0000 Max. :1.0000 Max. :1.0000 Max. :1.0000

.data\_Games .data\_Design .data\_Comics .data\_Publishing .data\_Fashion .data\_Theater .data\_Art

Min. :0.0000 Min. :0.0000 Min. :0.0000 Min. :0.000 Min. :0.0000 Min. :0.00000 Min. :0.00000

1st Qu.:0.0000 1st Qu.:0.0000 1st Qu.:0.0000 1st Qu.:0.000 1st Qu.:0.0000 1st Qu.:0.00000 1st Qu.:0.00000

Median :0.0000 Median :0.0000 Median :0.0000 Median :0.000 Median :0.0000 Median :0.00000 Median :0.00000

Mean :0.0743 Mean :0.0661 Mean :0.0319 Mean :0.111 Mean :0.0518 Mean :0.03195 Mean :0.08175

3rd Qu.:0.0000 3rd Qu.:0.0000 3rd Qu.:0.0000 3rd Qu.:0.000 3rd Qu.:0.0000 3rd Qu.:0.00000 3rd Qu.:0.00000

Max. :1.0000 Max. :1.0000 Max. :1.0000 Max. :1.000 Max. :1.0000 Max. :1.00000 Max. :1.00000

.data\_Photography .data\_Technology .data\_Dance .data\_Journalism Season Prj\_Name\_Length.Prj\_Name\_Length

Min. :0.00000 Min. :0.0000 Min. :0.00000 Min. :0.00000 Fall :4930 Min. : 1.00000

1st Qu.:0.00000 1st Qu.:0.0000 1st Qu.:0.00000 1st Qu.:0.00000 Spring:5319 1st Qu.:16.00000

Median :0.00000 Median :0.0000 Median :0.00000 Median :0.00000 Summer:5539 Median :29.00000

Mean :0.02845 Mean :0.0627 Mean :0.01265 Mean :0.01155 Winter:4212 Mean :30.87895

3rd Qu.:0.00000 3rd Qu.:0.0000 3rd Qu.:0.00000 3rd Qu.:0.00000 3rd Qu.:46.00000

Max. :1.00000 Max. :1.0000 Max. :1.00000 Max. :1.00000 Max. :85.00000

Duration Launched\_Year Deadline\_Year bins

Min. : 1.0 Min. :2009 Min. :2009 Third :3300

1st Qu.:30.0 1st Qu.:2012 1st Qu.:2012 Five :3066

Median :30.0 Median :2014 Median :2014 Second :2961

Mean :34.5 Mean :2013 Mean :2014 First :2728

3rd Qu.:38.0 3rd Qu.:2015 3rd Qu.:2015 Fourth :2552

Max. :92.0 Max. :2016 Max. :2016 Seven :2397

(Other):2996

> library(caret)

> Train <- createDataPartition(proj$state, p=0.7, list=FALSE)

> training <- Data1[ Train, ]

> testing <- Data1[ -Train, ]

> ctrl <- trainControl(method = "repeatedcv", number = 10, savePredictions = TRUE)

> mod\_fit <- train(state ~ main\_category+goal+Season+Launched\_Year+Duration+Deadline\_Year+bins,data=Data1, method="qda", family="binomial",trControl = ctrl, tuneLength = 5)

> pred = predict(mod\_fit, newdata=testing)

> confusionMatrix(data=pred, testing$state)

Confusion Matrix and Statistics

Reference

Prediction failed successful

failed 1167 412

successful 2332 2088

Accuracy : 0.5426

95% CI : (0.5299, 0.5553)

No Information Rate : 0.5833

P-Value [Acc > NIR] : 1

Kappa : 0.1521

Mcnemar's Test P-Value : <2e-16

Sensitivity : 0.3335

Specificity : 0.8352

Pos Pred Value : 0.7391

Neg Pred Value : 0.4724

Prevalence : 0.5833

Detection Rate : 0.1945

Detection Prevalence : 0.2632

Balanced Accuracy : 0.5844

'Positive' Class : failed