Untitled

```
summary(cars)
```

```
##      speed          dist
##  Min.   : 4.0   Min.   :  2.00
##  1st Qu.:12.0   1st Qu.: 26.00
##  Median :15.0   Median : 36.00
##  Mean   :15.4   Mean   : 42.98
##  3rd Qu.:19.0   3rd Qu.: 56.00
##  Max.   :25.0   Max.   :120.00
```

```
mydf <- read.csv("final.csv") # load data
nrow(mydf)
```

```
## [1] 111534
```

```
ncol(mydf)
```

```
## [1] 34
```

Randomize data

```
data_random <- mydf[sample(1:nrow(mydf)),]
head(data_random)
```

```
##               X FOMO FUD HODL MOON URL Unnamed..0 Unnamed..0.1 archived
## 74931 10236    0   0    0    0    0       7514         7514       NA
## 53324 53323    0   0    0    0    0      53323         1513        1
## 47645 47644    0   0    0    0    0      47644         1061        1
## 62003 62002    0   0    0    0    0      62002         2564       NA
## 49234 49233    0   0    0    0    0      49233         1574        1
## 59767 59766    0   0    0    0    0      59766          328       NA
##              author author_flair_css_class author_flair_text
## 74931 godgazillion
## 53324       borbus
## 47645        refto
## 62003      lglg666
## 49234     dghughes
## 59767      mgbyrnc
##
body
## 74931 Thinking its time to sell my original stake.  Its a tiny portion so it wi
ll have a negligible at best effect on my long term life if the price does what I
think will do.  However, I'm battling with myself between what is investing and wh
```

at is gambling? If I end up with some free coins than I've removed the gambling e
lement right? I do think financially in the long run that it will be a terrible d
ecision, but a moral one. I expect a ICO dot com boom style crash at some point o
ver the next few months/years, but I'll hold the rest through all that. I have an
armory wallet and paper backup. I can move BTC to bitstamp. However, how in gods
name can I sell the same amount of the bitcoin cash?......or bitcoin gold and diam
ond or whatever that is.   Bitstamp doesn't accept it yet, and I don't want to mov
e and lose the BCH (or others) when I'm cashing a bit out. Very much enjoyed this
sub for a few years now. Merlin560, chewtoy, that u/nannal and loads of others ha
ve provided some interesting and great insights. Thanks. Any info will be very he
lpful

53324
The post you are replying to is more about how "mining" works than how bitcoin wor
ks as money. A "bitcoin" is something that you have to work for or pay for in som
e other way and that other people will work for or pay for in some way. What part
do you not understand?

47645
If you read some two years ago, there were people who invested a ton in both AMD G
PU bitcoin farms and AMD stock, they should have made out alright on the bitcoin f
arms but the stock, well... not so much.. \n\nGPU sales to bitcoin farmers were ma
ybe high six figures, low seven figures tops, not enough to make a dent in AMDs fi
nancials.

62003
Yeah....this will be a long civil war between bitcoin and BCH.

49234
I believe that's the point, once the sticker is peeled revealing the private key y
ou cash it in then the physical coin is worthless.\n\n But yes I agree with you a
physical bitcoin seems counterintuitive to its reason for existence, but there may
be a situation where it's needed.

59767
i think people like you may actually be more insidious than blatant shills\n\nbcas
h is a malicious chinese tumor but you paint it as, oh its just burgerking to bitc
oin's mcdonalds\n\nyoure kinda a turd

##	controversiality	created_utc	distinguished	downs	gilded	id
## 74931	0	1511979533		NA	0	dqimkvd
## 53324	0	1386415117		0	0	cdvruqi
## 47645	0	1367592190		0	0	c9roe3d
## 62003	0	1510667404		NA	0	dpsxxm9
## 49234	0	1393737280		0	0	cfs8oj9
## 59767	1	1510622822		NA	0	dps7ldl

##	link_id	name	parent_id	pump	question	removal_reason
## 74931	t3_7gae0g		t3_7gae0g	0	1	NA
## 53324	t3_1saa9b	t1_cdvruqi	t1_cdvqxu7	1	1	NA
## 47645	t3_1dkk0l	t1_c9roe3d	t1_c9r80dr	1	0	NA
## 62003	t3_7cusz2		t3_7cusz2	1	0	NA
## 49234	t3_1z9y66	t1_cfs8oj9	t1_cfs8jzs	1	0	NA
## 59767	t3_7cs0m9		t1_dps7arq	1	0	NA

##	retrieved_on	score	score_hidden	sentiment	smiley_neg	smiley_pos
## 74931	1513132968	4	NA	0.9652	0	0
## 53324	1428355744	0	0	-0.2023	0	0
## 47645	1431337843	1	0	0.5106	0	0
## 62003	1512631890	0	NA	-0.5994	0	0
## 49234	1432620816	1	0	0.7050	0	0
## 59767	1512617925	1	NA	-0.0129	0	0

```
##          subreddit subreddit_id ups
## 74931 BitcoinMarkets     t5_2wwh3  NA
## 53324    programming      t5_2fwo   0
## 47645      investing     t5_2qhhq   1
## 62003     Bitcoincash     t5_34h22  NA
## 49234   TechNewsToday     t5_2sjnq   1
## 59767         Bitcoin     t5_2s3qj  NA
```

summary(data_random)

```
##        X              FOMO               FUD               HODL
##  Min.   :    0   Min.   :0.000000   Min.   :0.00000   Min.   :0.00000
##  1st Qu.:13941   1st Qu.:0.000000   1st Qu.:0.00000   1st Qu.:0.00000
##  Median :27883   Median :0.000000   Median :0.00000   Median :0.00000
##  Mean   :28598   Mean   :0.001739   Mean   :0.00772   Mean   :0.01132
##  3rd Qu.:41825   3rd Qu.:0.000000   3rd Qu.:0.00000   3rd Qu.:0.00000
##  Max.   :64693   Max.   :1.000000   Max.   :1.00000   Max.   :1.00000
##
##       MOON               URL            Unnamed..0       Unnamed..0.1
##  Min.   :0.000000   Min.   :0.0000   Min.   :    0   Min.   :    0
##  1st Qu.:0.000000   1st Qu.:0.0000   1st Qu.: 1386   1st Qu.:  542
##  Median :0.000000   Median :0.0000   Median : 9594   Median : 1287
##  Mean   :0.006877   Mean   :0.2534   Mean   :19620   Mean   : 1953
##  3rd Qu.:0.000000   3rd Qu.:1.0000   3rd Qu.:36810   3rd Qu.: 2760
##  Max.   :1.000000   Max.   :1.0000   Max.   :64693   Max.   :10260
##
##     archived                      author        author_flair_css_class
##  Min.   :0.00   BitcoinAllBot      : 5815                   :94764
##  1st Qu.:0.00   tippr              : 2757   noflair     : 3501
##  Median :1.00   [deleted]          : 1904   noob        : 3207
##  Mean   :0.71   censorship_notifier:  540   bulllongterm:  543
##  3rd Qu.:1.00   AutoModerator      :  431   Training    :  525
##  Max.   :1.00   bitcointip          :  404   training    :  360
##  NA's   :84947  (Other)            :99683   (Other)     : 8634
##             author_flair_text
##                        :96986
##  redditor for 3 months: 1226
##  Long-term Holder     :  543
##  Bullish              :  357
##  redditor for 2 months:  317
##  redditor for 2 weeks :  310
##  (Other)              :11795
##
body
##  **Bitcoin (BTC) Basic Info:** [Website](https://bitcoin.org) - r/Bitcoin - [Ab
stract](https://www.reddit.com/r/CryptoWikis/wiki/Bitcoin_basicinfo#wiki_short_des
cription) - [History](https://www.reddit.com/r/CryptoWikis/wiki/Bitcoin_basicinfo#
wiki_history) - [Exchanges](https://www.reddit.com/r/CryptoWikis/wiki/Bitcoin_basi
cinfo#wiki_exchanges) - [Wallets](https://www.reddit.com/r/CryptoWikis/wiki/Bitcoi
n_basicinfo#wiki_wallets) \n\n**Biases:** [Arguments For](https://www.reddit.com/r
/CryptoWikis/wiki/Bitcoin_pros) &amp; [Arguments Against](https://www.reddit.com/r
/CryptoWikis/wiki/Bitcoin_cons) | **CryptoWikis:** [Policy](https://www.reddit.com
```

/r/CryptoCurrency/wiki/policy#wiki_cryptowikis_program_-_.28work_in_progress.29) -
[Contribute Content](https://www.reddit.com/r/CryptoWikis/wiki/contributing)\n\n--
-\n\n\n*I am a bot, and this action was performed automatically. Please [contact t
he moderators of this subreddit](/message/compose/?to=/r/CryptoCurrency) if you ha
ve any questions or concerns.*:   71
It's called **Bitcoin Cash** or **BCC**/**XBC** abbreviated. [Why is this impo
rtant?](https://www.reddit.com/r/btc/comments/6r4no6/its_called_bitcoin_cash_the_t
erm_bcash_is_a/)\n**BCC** and **XBC** are the recommended ticker symbols on the [o
fficial website](https://www.bitcoincash.org) and used by all 4 current client imp
lementations.\n
:   70
This is good for bitcoin.
:   61
+1 Bitcoin. Verified.\n\n\nYou will be getting a bitcoin tip address shortly.\
n\n\nThanks, have a merry Christmas
:   57
This is good for bitcoin
:   48
bitcoin
:   47
(Other)
:111180
controversiality   created_utc   distinguished   downs
Min.   :0.00000   Min.   :1.368e+09   :110948   Min.   :0
1st Qu.:0.00000   1st Qu.:1.446e+09   admin   :   3   1st Qu.:0
Median :0.00000   Median :1.507e+09   moderator: 583   Median :0
Mean   :0.02252   Mean   :1.479e+09   Mean   :0
3rd Qu.:0.00000   3rd Qu.:1.512e+09   3rd Qu.:0
Max.   :1.00000   Max.   :1.522e+09   Max.   :0
NA's   :84947
gilded   id   link_id   name
Min.   :0.000000   dn02b2z: 2   t3_7g9cd3:   772   :84947
1st Qu.:0.000000   dn02bcq: 2   t3_7hhpxs: 593   t1_c9rc1bc: 1
Median :0.000000   dn02bpl: 2   t3_7lybxy: 357   t1_c9rc1px: 1
Mean   :0.001013   dn02c7s: 2   t3_7rguaj: 357   t1_c9rc1tg: 1
3rd Qu.:0.000000   dn02c9p: 2   t3_1tod7a: 329   t1_c9rc2rl: 1
Max.   :5.000000   dn02dsn: 2   t3_702o6b: 224   t1_c9rc5kw: 1
(Other):111522   (Other) :108902   (Other)   :26582
parent_id   pump   question   removal_reason
t3_7hhpxs: 492   Min.   :0.00   Min.   :0.0000   Mode:logical
t3_1tod7a: 238   1st Qu.:0.00   1st Qu.:0.0000   NA's:111534
t3_7g9cd3:   193   Median :1.00   Median :0.0000
t3_7hmjdw: 103   Mean   :0.58   Mean   :0.3133
t3_7gb4ou: 89   3rd Qu.:1.00   3rd Qu.:1.0000
t3_1sbeq8:   70   Max.   :1.00   Max.   :1.0000
(Other) :110349
retrieved_on   score   score_hidden   sentiment
Min.   :1.425e+09   Min.   : -236.000   Min.   :0   Min.   :-0.9996
1st Qu.:1.450e+09   1st Qu.:   1.000   1st Qu.:0   1st Qu.:-0.1027
Median :1.507e+09   Median :   1.000   Median :0   Median : 0.2500
Mean   :1.488e+09   Mean   :   4.577   Mean   :0   Mean   : 0.1933
3rd Qu.:1.514e+09   3rd Qu.:   3.000   3rd Qu.:0   3rd Qu.: 0.6474
Max.   :1.526e+09   Max.   :17424.000   Max.   :1   Max.   : 0.9997
NA's   :84947

```
##     smiley_neg          smiley_pos                  subreddit
##   Min.   :0.000000    Min.   :0.00000    Bitcoin        :36900
##   1st Qu.:0.000000    1st Qu.:0.00000    btc            :12656
##   Median :0.000000    Median :0.00000    BitcoinAll     : 6352
##   Mean   :0.002753    Mean   :0.01752    CryptoCurrency: 4741
##   3rd Qu.:0.000000    3rd Qu.:0.00000    BitcoinMarkets: 3965
##   Max.   :1.000000    Max.   :1.00000    ethtrader      : 2726
##                                          (Other)       :44194
##     subreddit_id          ups
##   t5_2s3qj:36900    Min.   :-155.00
##   t5_2si5v:12656    1st Qu.:   1.00
##   t5_39m7n: 6352    Median :   1.00
##   t5_2wlj3: 4741    Mean   :   3.65
##   t5_2wwh3: 3965    3rd Qu.:   3.00
##   t5_37jgj: 2726    Max.   :3546.00
##   (Other) :44194    NA's   :76685
```

Model Fitting

```
train <- data_random[1:55766,]
test <- data_random[55767:111532,]

model <- glm(pump ~ sentiment + smiley_pos + smiley_neg  + FOMO + MOON + HODL + FU
D + question + URL, data = train, family = binomial)
model1 <-glm(pump ~ sentiment + smiley_pos + smiley_neg  + FOMO + MOON + HODL + FU
D + question + URL, data = test, family = binomial)

summary(model)
```

```
##
## Call:
## glm(formula = pump ~ sentiment + smiley_pos + smiley_neg + FOMO +
##       MOON + HODL + FUD + question + URL, family = binomial, data = train)
##
## Deviance Residuals:
##     Min      1Q  Median      3Q     Max
## -1.412  -1.305   1.023   1.054   1.526
##
## Coefficients:
##              Estimate Std. Error z value Pr(>|z|)
## (Intercept)  0.28343    0.01157  24.494  < 2e-16 ***
## sentiment    0.01975    0.01626   1.215 0.224481
## smiley_pos  -0.07033    0.06537  -1.076 0.281986
## smiley_neg   0.08997    0.16216   0.555 0.579020
## FOMO        -0.73664    0.20241  -3.639 0.000273 ***
## MOON        -0.02994    0.10250  -0.292 0.770191
## HODL        -0.21003    0.08082  -2.599 0.009359 **
## FUD         -0.32007    0.09889  -3.237 0.001210 **
## question     0.07375    0.01879   3.924  8.7e-05 ***
## URL          0.07034    0.02009   3.502 0.000463 ***
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## (Dispersion parameter for binomial family taken to be 1)
##
##     Null deviance: 75894  on 55765  degrees of freedom
## Residual deviance: 75824  on 55756  degrees of freedom
## AIC: 75844
##
## Number of Fisher Scoring iterations: 4
```

Interpret results of model

```
anova(model, test="Chisq")
```

```
## Analysis of Deviance Table
##
## Model: binomial, link: logit
##
## Response: pump
##
## Terms added sequentially (first to last)
##
##
##              Df Deviance Resid. Df Resid. Dev  Pr(>Chi)
## NULL                        55765      75894
## sentiment     1   2.4573     55764      75892 0.1169763
## smiley_pos    1   1.0320     55763      75891 0.3096848
## smiley_neg    1   0.2666     55762      75891 0.6055927
## FOMO          1  16.0783     55761      75875 6.078e-05 ***
## MOON          1   0.2667     55760      75874 0.6055822
## HODL          1   7.5805     55759      75867 0.0059004 **
## FUD           1   9.8699     55758      75857 0.0016800 **
## question      1  20.3428     55757      75837 6.474e-06 ***
## URL           1  12.2851     55756      75824 0.0004566 ***
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

```
library(pscl)
```

```
## Classes and Methods for R developed in the
## Political Science Computational Laboratory
## Department of Political Science
## Stanford University
## Simon Jackman
## hurdle and zeroinfl functions by Achim Zeileis
```

```
pR2(model)
```

```
##            llh        llhNull             G2       McFadden           r2ML
## -3.791213e+04  -3.794722e+04   7.017913e+01   9.246938e-04   1.257666e-03
##           r2CU
##   1.691362e-03
```

Predictive ability model

```r
#fitted.results <- predict(model,newdata=subset(test,select=c(2,3,4,5,6,23,24,29,30,31)),type='response')
#train1 = data_random[1:55766,]

#glm.fit <- glm(pump ~ sentiment + smiley_pos + smiley_neg  + FOMO + MOON + HODL + FUD + question + URL, data = data_random, family = binomial, subset = train1)

#glm.probs <- predict(glm.fit, newdata = data_random[!train1], type = "response")
#glm.pred <- ifelse(glm.probs > 0.5, "1", "0")

#pump1 = data_random$pump[!train1]
#table(glm.pred, pump)

#mean(glm.pred == pump1)


#misClasificError <- mean(fitted.results != test$pump)
#print(paste('Accuracy',1-misClasificError))
```