

Film_Coefficients.R

```
coef_film = read.csv(file = "coef_film.csv", header = TRUE);
# Omit all N/A cells and create a subset called Film1
Film1 = na.omit(coef_film); # 3807 elements left
# Header of Film 1
head(Film1, 0);

## [1] num_critic_for_reviews    duration
## [3] director_facebook_likes  actor_3_facebook_likes
## [5] actor_1_facebook_likes   gross
## [7] num_voted_users          cast_total_facebook_likes
## [9] num_user_for_reviews     budget
## [11] title_year               actor_2_facebook_likes
## [13] imdb_score               aspect_ratio
## [15] movie_facebook_likes

# Get correlation coefficients for all 15 variables
CoeffFilm = as.matrix.data.frame(cor(Film1));
CoeffFilm;
```

Position	Corr	Variable 1	Variable 2
[7,1]	0.5961	num_critic_for_reviews	num_voted_users
[15,1]	0.7049	num_critic_for_reviews	movie_facebook_likes
[8,5]	0.9449	cast_total_facebook_likes	actor_1_facebook_likes
[9,6]	0.5479	num_user_for_reviews	gross
[12,4]	0.5542	actor_3_facebook_likes	actor_2_facebook_likes
[6,7]	0.6279	num_voted_users	gross
[9,7]	0.7803	num_voted_users	num_user_for_reviews
[15,7]	0.5207	num_voted_users	movie_facebook_likes
[12,8]	0.6440	cast_total_facebook_likes	actor_2_facebook_likes
[1,9]	0.5677	num_critic_for_reviews	num_user_for_reviews

```
##      [,1]      [,2]      [,3]      [,4]      [,5]      [,6]
## [1,] 1.0000000 0.22993252 0.17617943 0.25440000 0.16955322 0.47028293
## [2,] 0.2299325 1.00000000 0.17935859 0.12572961 0.08463591 0.24688808
## [3,] 0.1761794 0.17935859 1.00000000 0.11828813 0.09081600 0.13938941
## [4,] 0.2544000 0.12572961 0.11828813 1.00000000 0.25377882 0.30098599
## [5,] 0.1695532 0.08463591 0.09081600 0.25377882 1.00000000 0.14661752
## [6,] 0.4702829 0.24688808 0.13938941 0.30098599 0.14661752 1.00000000
## [7,] 0.5961402 0.34006479 0.29996514 0.26907942 0.18195925 0.62794181
## [8,] 0.2402129 0.12110528 0.11982926 0.49072051 0.94493524 0.23809856
## [9,] 0.5677108 0.35171131 0.21800316 0.20715858 0.12501540 0.54788728
## [10,] 0.1060209 0.06864293 0.01852480 0.04051746 0.01708566 0.10079124
## [11,] 0.4099868 -0.12888246 -0.04495216 0.11515353 0.09323697 0.05334171
## [12,] 0.2549338 0.12923936 0.11699842 0.55420902 0.39271040 0.25388179
## [13,] 0.3444940 0.36682885 0.19078858 0.06507926 0.09322807 0.21293755
```

```

## [14,] 0.1802158 0.15335047 0.03771198 0.04707025 0.05754491 0.06586123
## [15,] 0.7049255 0.21895908 0.16098235 0.27043711 0.13038249 0.37226872
##      [,7]      [,8]      [,9]      [,10]      [,11]      [,12]
## [1,] 0.59614020 0.24021294 0.56771080 0.10602088 0.40998678 0.25493384
## [2,] 0.34006479 0.12110528 0.35171131 0.06864293 -0.12888246 0.12923936
## [3,] 0.29996514 0.11982926 0.21800316 0.01852480 -0.04495216 0.11699842
## [4,] 0.26907942 0.49072051 0.20715858 0.04051746 0.11515353 0.55420902
## [5,] 0.18195925 0.94493524 0.12501540 0.01708566 0.09323697 0.39271040
## [6,] 0.62794181 0.23809856 0.54788728 0.10079124 0.05334171 0.25388179
## [7,] 1.00000000 0.25156895 0.78033326 0.06725588 0.02209314 0.24617732
## [8,] 0.25156895 1.00000000 0.18207316 0.02944065 0.12341375 0.64401957
## [9,] 0.78033326 0.18207316 1.00000000 0.07155601 0.01772838 0.18935972
## [10,] 0.06725588 0.02944065 0.07155601 1.00000000 0.04635406 0.03619967
## [11,] 0.02209314 0.12341375 0.01772838 0.04635406 1.00000000 0.11908942
## [12,] 0.24617732 0.64401957 0.18935972 0.03619967 0.11908942 1.00000000
## [13,] 0.47841138 0.10639347 0.32319318 0.02931092 -0.12940647 0.10213352
## [14,] 0.08566706 0.06959177 0.09848876 0.02592168 0.22017884 0.06398919
## [15,] 0.52068480 0.20517663 0.37377976 0.05375781 0.30252163 0.23136432
##      [,13]      [,14]      [,15]
## [1,] 0.34449398 0.18021579 0.70492550
## [2,] 0.36682885 0.15335047 0.21895908
## [3,] 0.19078858 0.03771198 0.16098235
## [4,] 0.06507926 0.04707025 0.27043711
## [5,] 0.09322807 0.05754491 0.13038249
## [6,] 0.21293755 0.06586123 0.37226872
## [7,] 0.47841138 0.08566706 0.52068480
## [8,] 0.10639347 0.06959177 0.20517663
## [9,] 0.32319318 0.09848876 0.37377976
## [10,] 0.02931092 0.02592168 0.05375781
## [11,] -0.12940647 0.22017884 0.30252163
## [12,] 0.10213352 0.06398919 0.23136432
## [13,] 1.00000000 0.02837279 0.27988575
## [14,] 0.02837279 1.00000000 0.11072686
## [15,] 0.27988575 0.11072686 1.00000000

```