

Comparative Analysis

PS_2020_318-M.R.Surandi

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```
library(dplyr)

## Warning: package 'dplyr' was built under R version 4.3.3

##
## Attaching package: 'dplyr'

## The following objects are masked from 'package:stats':
##
##   filter, lag

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

options(scipen = 999)

df<-read.csv("C:\\Users\\RISINA\\Desktop\\Concrete project\\socio-env-
analysis\\Data_set.csv")

#Get the missing count and its proportion to the data set
missing_count<-vector()
mp<-vector()
for (i in 1:213) {
  missing_count[i] <- sum(is.na(df[i,5:68]))#counting missing values in each
column
  mp[i]<-(missing_count[i]/64)*100
}

df$missing_proportion<-mp

#Find the mean of the each rows
avg<-vector()
for (i in 1:213) {
  avg[i] <- rowMeans(df[i,5:68], na.rm = TRUE)
}

df$Mean<-avg

df[,5:68][is.na(df[,5:68])] <- "na"
```

```
#Replace missing values with 'avg'(mean we have found)
```

```
for (i in 1:213) {  
  for (j in 5:68) {  
    if(df[i,j]=="na"){  
      df[i,j]<-avg[i]  
    }  
  }  
}
```

```
#filter the rows that have missing count less than to 70%
```

```
df1<-data.frame(df)  
df1<-df[df$missing_proportion<=70 & df$Mean !=0,]
```

```
#Create 3 data frame to each country
```

```
#Create data frame to sri lanka
```

```
dfSL<-data.frame(df1)  
dfSL<-df1[df1$Country.Code=="LKA",]
```

```
#Transpose
```

```
Sri_Lanka<-data.frame(t(dfSL[1:71,5:68]))  
Sri_Lanka<-Sri_Lanka[1:64,1:51]  
Sri_Lanka
```

```
##           X1           X2           X3  
X4  
## X1960 23.2090909090909 86.7189665368182 0.278336732392157  
0.276926519769231  
## X1961 23.2090909090909 86.7189665368182 0.278336732392157  
0.276926519769231  
## X1962 23.2090909090909 86.7189665368182 0.278336732392157  
0.276926519769231  
## X1963 23.2090909090909 86.7189665368182 0.278336732392157  
0.276926519769231  
## X1964 23.2090909090909 86.7189665368182 0.278336732392157  
0.276926519769231  
## X1965 23.2090909090909 86.7189665368182 0.278336732392157  
0.276926519769231  
## X1966 23.2090909090909 86.7189665368182 0.278336732392157  
0.276926519769231  
## X1967 23.2090909090909 86.7189665368182 0.278336732392157  
0.276926519769231  
## X1968 23.2090909090909 86.7189665368182 0.278336732392157
```

0.276926519769231
X1969 23.2090909090909 86.7189665368182 0.278336732392157
0.276926519769231
X1970 23.2090909090909 86.7189665368182 0.278336732392157
0.231008295
X1971 23.2090909090909 86.7189665368182 0.213603863
0.213603863
X1972 23.2090909090909 86.7189665368182 0.20228457
0.20228457
X1973 23.2090909090909 86.7189665368182 0.287241747
0.287241747
X1974 23.2090909090909 86.7189665368182 0.272557399
0.272557399
X1975 23.2090909090909 86.7189665368182 0.562197115
0.562197115
X1976 23.2090909090909 86.7189665368182 0.404635612
0.404635612
X1977 23.2090909090909 86.7189665368182 1.122893629
1.122893629
X1978 23.2090909090909 86.7189665368182 1.604507312
1.604507312
X1979 23.2090909090909 86.7189665368182 0.54968088
0.54968088
X1980 23.2090909090909 86.7189665368182 0.556424633
0.556424633
X1981 23.2090909090909 86.7189665368182 0.450825535
0.450825535
X1982 23.2090909090909 86.7189665368182 0.625480844
0.625480844
X1983 23.2090909090909 86.7189665368182 0.426606368
0.426606368
X1984 23.2090909090909 86.7189665368182 0.294295113
0.294295113
X1985 23.2090909090909 86.7189665368182 0.206830936
0.206830936
X1986 23.2090909090909 86.7189665368182 0.357038962
0.357038962
X1987 23.2090909090909 86.7189665368182 0.321962768
0.321962768
X1988 23.2090909090909 86.7189665368182 0.325391009
0.325391009
X1989 23.2090909090909 86.7189665368182 0.319368395
0.319368395
X1990 23.2090909090909 86.7189665368182 0.331612898
0.331612898
X1991 23.2090909090909 86.7189665368182 0.432070243
0.432070243
X1992 23.2090909090909 86.7189665368182 0.402081728
0.402081728
X1993 23.2090909090909 86.7189665368182 0.35191985

0.35191985			
## X1994 23.2090909090909 86.7189665368182			0.278789179
0.278789179			
## X1995 23.2090909090909 86.7189665368182			0.31732513
0.31732513			
## X1996 23.2090909090909 86.7189665368182			0.290259567
0.290259567			
## X1997 23.2090909090909 86.7189665368182			0.152156184
0.152156184			
## X1998 23.2090909090909 86.7189665368182			0.135270179
0.135270179			
## X1999 23.2090909090909 86.7189665368182			0.154479778
0.154479778			
## X2000	16.4	70.3423996	0.138427521
0.138427521			
## X2001	17.1	63.6	0.146444928
0.146444928			
## X2002	17.5	80.7	0.156161254
0.156161254			
## X2003	18.1	74.97201538	0.154092077
0.154092077			
## X2004	18.7	76.51680756	0.11888646
0.11888646			
## X2005	19.2	78.07408142	0.10307594
0.10307594			
## X2006	19.8	82.05	0.132781295
0.132499164			
## X2007	20.4	80	0.15346802
0.152881929			
## X2008	20.8	82.86255646	0.119248842
0.11496849			
## X2009	21.5	87.09	0.108101643
0.102097393			
## X2010	22	85.3	0.129407955
0.127625354			
## X2011	22.7	87.76	0.113286284
0.109454217			
## X2012	23.3	87	0.093921252
0.091323854			
## X2013	24.1	90.2	0.076894108
0.075553063			
## X2014	24.8	92.69762421	0.072984491
0.071787454			
## X2015	25.9	94.33074951	0.079462096
0.078415446			
## X2016	27	97.5	0.08250463
0.081855619			
## X2017	27.9	97.5	0.060493913
0.060023196			
## X2018	29.1	99.58557892	0.043164892

0.043095889				
## X2019	30.2	99.76135254	0.049243351	
0.049243351				
## X2020	31.5	99.97409821	0.057573715	
0.057573715				
## X2021	32.6	100	0.055757259	
0.055757259				
## X2022	23.2090909090909	86.7189665368182	0.278336732392157	
0.276926519769231				
## X2023	23.2090909090909	86.7189665368182	0.278336732392157	
0.276926519769231				
##	X5	X6	X7	X11
## X1960	38.3758259980328	32.10419693	23.4809995090323	0.635225577709677
## X1961	27.47568171	32.90995044	23.4809995090323	0.635225577709677
## X1962	27.22053899	31.09252254	23.4809995090323	0.635225577709677
## X1963	32.84962526	32.34974143	23.4809995090323	0.635225577709677
## X1964	33.53532132	30.96238539	23.4809995090323	0.635225577709677
## X1965	34.38048158	28.56488687	23.4809995090323	0.635225577709677
## X1966	35.16185616	28.68265285	23.4809995090323	0.635225577709677
## X1967	35.95917716	30.0772318	23.4809995090323	0.635225577709677
## X1968	37.01164089	31.62786977	23.4809995090323	0.635225577709677
## X1969	37.12326583	29.32323546	23.4809995090323	0.635225577709677
## X1970	37.20299793	28.76776884	23.4809995090323	0.635225577709677
## X1971	37.29867645	27.52395522	23.4809995090323	0.635225577709677
## X1972	37.39435497	26.73869749	23.4809995090323	0.635225577709677
## X1973	37.49003349	27.66915715	23.4809995090323	0.635225577709677
## X1974	37.58571201	33.52872346	23.4809995090323	0.635225577709677
## X1975	37.61760485	30.6494283	23.4809995090323	0.635225577709677
## X1976	38.20762239	29.32061172	23.4809995090323	0.635225577709677
## X1977	38.79763993	30.97782322	23.4809995090323	0.635225577709677
## X1978	39.37171105	30.78518565	23.4809995090323	0.635225577709677
## X1979	37.61760485	27.23629969	23.4809995090323	0.635225577709677
## X1980	37.45814065	27.81798727	23.4809995090323	0.635225577709677
## X1981	37.45814065	27.96159105	23.4809995090323	0.635225577709677
## X1982	36.61298039	26.5994502	23.4809995090323	0.635225577709677
## X1983	36.80433743	28.4760072	23.4809995090323	0.635225577709677
## X1984	36.85217669	28.85648932	23.4809995090323	0.635225577709677
## X1985	36.91596237	28.05746361	23.4809995090323	0.635225577709677
## X1986	37.09137299	27.45499681	23.4809995090323	0.635225577709677
## X1987	37.21894435	27.30228993	23.4809995090323	0.635225577709677
## X1988	37.26678361	26.68362343	23.4809995090323	0.635225577709677
## X1989	37.31462287	25.95598285	23.4809995090323	0.635225577709677
## X1990	37.29867645	26.68499557	18.50189394	0.223156186
## X1991	37.34651571	27.08797056	19.11583333	0.228827723
## X1992	37.37840855	26.12236113	19.72977273	0.297785061
## X1993	36.99569447	24.88070331	20.34371212	0.285617138
## X1994	37.04353373	23.97383949	20.95765152	0.320168885
## X1995	37.09137299	23.14012307	21.57159091	0.319976727
## X1996	37.10731941	22.53906328	22.1855303	0.456012949
## X1997	37.12326583	21.94860064	22.7994697	0.45208111

## X1998	37.13921225	21.16449052	23.41340909	0.463794714
## X1999	37.39435497	20.72848094	24.02734848	0.508628332
## X2000	37.47408707	19.92731504	24.64128788	0.582056032
## X2001	37.49003349	20.0666052	24.61681818	0.573353189
## X2002	37.56976559	14.27932254	24.59234848	0.595749807
## X2003	37.79301547	13.23051488	24.56787879	0.643018404
## X2004	36.83623027	12.54380414	24.54340909	0.66023168
## X2005	40.02551427	11.81947682	24.51893939	0.710810981
## X2006	38.90926487	11.33628023	24.51893939	0.624280788
## X2007	38.11194387	11.68316433	24.51893939	0.676917851
## X2008	41.38095997	13.37920077	24.51893939	0.631515599
## X2009	41.62015627	12.6919713	24.51893939	0.600093436
## X2010	41.77962048	9.048337007	24.51893939	0.632448603
## X2011	43.53372668	9.53315935	24.51893939	0.738753109
## X2012	43.69319088	7.910288868	24.51893939	0.829817672
## X2013	43.69319088	7.924604117	24.51893939	0.683729265
## X2014	43.69319088	8.080707923	24.51893939	0.821974874
## X2015	44.26994975	8.216938879	24.51893939	0.901775003
## X2016	44.43151891	7.261718478	24.51893939	1.081309957
## X2017	44.59631945	7.43067878	24.51893939	1.075961371
## X2018	45.44807966	7.592066517	24.51893939	1.000936779
## X2019	45.44729471	7.256248938	24.51893939	1.074526441
## X2020	45.45748464	8.238012422	24.51893939	0.996683243
## X2021	45.45748464	8.834625715	23.4809995090323	0.635225577709677
## X2022	38.3758259980328	8.749250343	23.4809995090323	0.635225577709677
## X2023	38.3758259980328	21.6089385236032	23.4809995090323	0.635225577709677
##	X13	X14	X16	
X17				
## X1960	-0.285245553083333	5313.54843137255	2.05156795104444	
	34.3628445540909			
## X1961	-0.285245553083333	5313.54843137255	2.05156795104444	
	34.3628445540909			
## X1962	-0.285245553083333	5313.54843137255	2.05156795104444	
	34.3628445540909			
## X1963	-0.285245553083333	5313.54843137255	2.05156795104444	
	34.3628445540909			
## X1964	-0.285245553083333	5313.54843137255	2.05156795104444	
	34.3628445540909			
## X1965	-0.285245553083333	5313.54843137255	2.05156795104444	
	34.3628445540909			
## X1966	-0.285245553083333	5313.54843137255	2.05156795104444	
	34.3628445540909			
## X1967	-0.285245553083333	5313.54843137255	2.05156795104444	
	34.3628445540909			
## X1968	-0.285245553083333	5313.54843137255	2.05156795104444	
	34.3628445540909			
## X1969	-0.285245553083333	5313.54843137255	2.05156795104444	
	34.3628445540909			
## X1970	-0.285245553083333	5020.85	2.05156795104444	
	34.3628445540909			

## X1971 -0.285245553083333 26.01175125	4900.53	0
## X1972 -0.285245553083333 30.49144408	5178.79	0
## X1973 -0.285245553083333 31.10530723	5286.07	0
## X1974 -0.285245553083333 26.34564325	5049.48	0
## X1975 -0.285245553083333 24.06802711	4946.93	0
## X1976 -0.285245553083333 23.53394827	5154.97	0
## X1977 -0.285245553083333 25.40010916	5052.68	0
## X1978 -0.285245553083333 27.40800523	5117.77	0
## X1979 -0.285245553083333 28.8030184	5460.14	0
## X1980 -0.285245553083333 29.23335183	5413.68	0
## X1981 -0.285245553083333 28.64684178	5178.59	0
## X1982 -0.285245553083333 30.10971431	5307.95	0
## X1983 -0.285245553083333 30.48243335	5637.18	0
## X1984 -0.285245553083333 26.45727191	4991.67	0
## X1985 -0.285245553083333 24.43139872	5161.67	0
## X1986 -0.285245553083333 24.1379905	5284.74	0
## X1987 -0.285245553083333 25.69574701	5479.06	0
## X1988 -0.285245553083333 24.56767902	5324.11	0
## X1989 -0.285245553083333 23.31428138	5162.1	0
## X1990 -0.285245553083333 24.02020093	5386.8	0
## X1991 -0.285245553083333 25.00236178	5375.16	0
## X1992 -0.285245553083333 24.68206838	5222.87	0
## X1993 -0.285245553083333 29.68370235	5259.17	0
## X1994 -0.285245553083333 31.28738593	5132.05	0
## X1995 -0.285245553083333 33.02701832	5321.75	0

## X1996	-0.056539331	5227.84	0
37.44205087			
## X1997	-0.285245553083333	5397.3	0
37.59233661			
## X1998	-0.083364762	5734.04	0
39.00010396			
## X1999	-0.285245553083333	5097.98	0
39.84675414			
## X2000	-0.199228778	5096.96	0
42.9804053			
## X2001	-0.285245553083333	5316.12	0
43.31077659			
## X2002	-0.216593146	5357.62	0
44.56981265			
## X2003	-0.27202031	5378.64	0
46.38035351			
## X2004	-0.167387903	5371.18	0
45.83868444			
## X2005	-0.33986178	5517.4	0
45.33469753			
## X2006	-0.194801018	5364.18	0
43.24540599			
## X2007	-0.146113589	5304.99	0
45.18158132			
## X2008	-0.21860835	5276.16	0
44.35420077			
## X2009	-0.396393329	5489.78	0
43.55871971			
## X2010	-0.41968292	5460.3	0
43.08770527			
## X2011	-0.399362594	5319.92	8.903757077
48.84018447			
## X2012	-0.241880506	5480.96	11.79732796
47.31202305			
## X2013	-0.220829561	5366.13	12.21824836
45.87417027			
## X2014	-0.345142692	5394.34	25.69617206
50.26849245			
## X2015	-0.376569152	5439.2	33.70505234
34.3628445540909			
## X2016	-0.335664779	5806.03	2.05156795104444
34.3628445540909			
## X2017	-0.489461154	5485.57	2.05156795104444
34.3628445540909			
## X2018	-0.352467418	5239.11	2.05156795104444
34.3628445540909			
## X2019	-0.303825676	5594.01	2.05156795104444
34.3628445540909			
## X2020	-0.33045432	5668.45	2.05156795104444
34.3628445540909			


```
## X2021      -0.356352985 5313.54843137255 2.05156795104444
34.3628445540909
## X2022      -0.383287221 5313.54843137255 2.05156795104444
34.3628445540909
## X2023     -0.285245553083333 5313.54843137255 2.05156795104444
34.3628445540909
```

##		X18	X19	X20	X21
## X1960	2.26571428571429	370.712661588636		5.465	64.9885245901639
## X1961	2.26571428571429	370.712661588636		5.331	30.72
## X1962	2.26571428571429	370.712661588636		5.261	32.72
## X1963	2.26571428571429	370.712661588636		5.211	34.09
## X1964	2.26571428571429	370.712661588636		5.135	36.3
## X1965	2.26571428571429	370.712661588636		5.004	33.1
## X1966	2.26571428571429	370.712661588636		4.884	33.5
## X1967	2.26571428571429	370.712661588636		4.855	37.52
## X1968	2.26571428571429	370.712661588636		4.682	39.14
## X1969	2.26571428571429	370.712661588636		4.5	38.79
## X1970	2.26571428571429	370.712661588636		4.361	41.47
## X1971	2.26571428571429	300.1185098		4.242	41.31
## X1972	2.26571428571429	313.2446064		4.147	40.65
## X1973	2.26571428571429	313.8733143		4.033	40.02
## X1974	2.26571428571429	292.7025797		3.848	45.13
## X1975	2.26571428571429	300.7340403		3.792	47.08
## X1976	2.26571428571429	297.3638712		3.746	47.83
## X1977	2.26571428571429	289.3295399		3.676	48.41
## X1978	2.26571428571429	299.7332051		3.724	51.18
## X1979	2.26571428571429	305.5658546		3.74	59.53
## X1980	2.26571428571429	303.4394888		3.643	64.68
## X1981	2.26571428571429	304.297648		3.576	61.36
## X1982	2.26571428571429	316.9344053		3.298	58.18
## X1983	2.26571428571429	314.06426		3.093	65.63
## X1984	2.26571428571429	319.1726838		2.988	61.49
## X1985	2.26571428571429	310.4329526		2.879	63.64
## X1986	2.26571428571429	316.2743952		2.744	63.61
## X1987	2.26571428571429	323.9639795		2.657	55.12
## X1988	2.26571428571429	324.1646941		2.565	58.45
## X1989	2.26571428571429	321.0343382		2.558	55.89
## X1990	2.26571428571429	320.631938		2.517	60.71
## X1991	2.26571428571429	321.5084624		2.5	58.29
## X1992	2.26571428571429	326.013505		2.483	58.71
## X1993	2.26571428571429	339.8266124		2.406	62.68
## X1994	2.26571428571429	322.9575104		2.343	67.37
## X1995	2.26571428571429	330.3602373		2.295	69.34
## X1996	2.26571428571429	366.7684977		2.238	61.14
## X1997	2.26571428571429	377.48835		2.182	63.01
## X1998	2.26571428571429	381.4370481		2.116	64.58
## X1999	2.26571428571429	404.9262226		2.138	67.37
## X2000	3.12	443.4555005		2.191	68.86
## X2001	3.06	425.4418606		2.261	66.67
## X2002	3	428.9594833		2.275	67.7

## X2003	3	449.7672922	2.276	70.36
## X2004	2.88	451.4021778	2.267	67.02
## X2005	2.78	457.4926453	2.283	73.32
## X2006	2.6	457.0817464	2.344	74.81
## X2007	2.48	461.2073867	2.327	74.12
## X2008	2.28	449.3119592	2.275	82.75
## X2009	2.24	441.6482928	2.224	81.48
## X2010	2.21	471.3088098	2.196	89.51
## X2011	2.07	501.3422265	2.206	85.74
## X2012	1.95	535.4959929	2.196	90.74
## X2013	1.74	474.7681641	2.181	99.17
## X2014	1.78	504.3108211	2.13	89.76
## X2015	1.77	370.712661588636	2.091	105.56
## X2016	1.85	370.712661588636	2.068	104.68
## X2017	1.71	370.712661588636	2.053	83.18
## X2018	1.65	370.712661588636	2.031	105
## X2019	1.68	370.712661588636	2.019	107.94
## X2020	1.73	370.712661588636	2	125.88
## X2021	2.26571428571429	370.712661588636	3.09426229508197	130.31
## X2022	2.26571428571429	370.712661588636	3.09426229508197	64.9885245901639
## X2023	2.26571428571429	370.712661588636	3.09426229508197	64.9885245901639
##	X22	X23	X24	X27
## X1960	34.714007370625	34.4763957625	4.40496797318033	-0.1827458495
## X1961	34.714007370625	34.4763957625	4.40496797318033	-0.1827458495
## X1962	34.714007370625	34.4763957625	3.818019558	-0.1827458495
## X1963	34.714007370625	34.4763957625	2.516748594	-0.1827458495
## X1964	34.714007370625	34.4763957625	3.906433837	-0.1827458495
## X1965	34.714007370625	34.4763957625	2.536953536	-0.1827458495
## X1966	34.714007370625	34.4763957625	5.023789438	-0.1827458495
## X1967	34.714007370625	34.4763957625	6.43902442	-0.1827458495
## X1968	34.714007370625	34.4763957625	5.801094166	-0.1827458495
## X1969	34.714007370625	34.4763957625	7.716819662	-0.1827458495
## X1970	34.714007370625	34.4763957625	3.846629857	-0.1827458495
## X1971	34.714007370625	26.01177758	1.306905397	-0.1827458495
## X1972	34.714007370625	30.49144408	-0.410479911	-0.1827458495
## X1973	34.714007370625	31.10533142	7.057398935	-0.1827458495
## X1974	34.714007370625	26.34566871	3.845830836	-0.1827458495
## X1975	34.714007370625	24.06802711	6.126233161	-0.1827458495
## X1976	34.714007370625	23.53397244	3.335106692	-0.1827458495
## X1977	34.714007370625	25.40010916	5.100590264	-0.1827458495
## X1978	34.714007370625	27.40800523	5.653836858	-0.1827458495
## X1979	34.714007370625	28.80304069	6.403556926	-0.1827458495
## X1980	34.714007370625	29.23332978	5.846026516	-0.1827458495
## X1981	34.714007370625	28.64684178	5.699524767	-0.1827458495
## X1982	34.714007370625	30.57580187	4.141495702	-0.1827458495
## X1983	34.714007370625	30.91622868	4.81399097	-0.1827458495
## X1984	34.714007370625	26.80580479	5.099146558	-0.1827458495
## X1985	34.714007370625	24.74067138	4.999406369	-0.1827458495
## X1986	34.714007370625	24.50859956	4.355546917	-0.1827458495
## X1987	34.714007370625	26.12117835	1.725610693	-0.1827458495

##	X1988	34.714007370625	24.74355181	2.472685038	-0.1827458495
##	X1989	34.714007370625	23.55703249	2.299301412	-0.1827458495
##	X1990	37.47934939	24.11358073	6.399995311	-0.1827458495
##	X1991	37.18607878	25.13374657	4.599987244	-0.1827458495
##	X1992	36.89280816	24.79726535	4.399991252	-0.1827458495
##	X1993	36.59953755	29.80516926	6.900063251	-0.1827458495
##	X1994	36.30626694	31.698369	5.599918725	-0.1827458495
##	X1995	36.01299633	33.06375348	5.500085234	-0.1827458495
##	X1996	35.71972572	37.55152811	3.799967206	-0.183629289
##	X1997	35.42645511	37.67683864	6.405399696	-0.1827458495
##	X1998	35.1331845	38.92736154	4.698423048	-0.462085247
##	X1999	34.83991389	39.8370321	4.300540498	-0.1827458495
##	X2000	34.54664328	43.0245776	6.000033158	-0.342374563
##	X2001	34.44649976	43.35644415	-1.545408134	-0.1827458495
##	X2002	34.34635624	44.58774447	3.964675685	-0.072716258
##	X2003	34.24621273	46.37187614	5.940269078	-0.271150827
##	X2004	34.14606921	45.79686823	5.445061279	-0.439886004
##	X2005	34.04592569	45.29383381	6.241748044	-0.312482685
##	X2006	33.94578217	43.43980102	7.668291901	-0.162567288
##	X2007	33.84563865	45.38813774	6.796826119	-0.076403596
##	X2008	33.74549514	44.86267171	5.950088145	-0.120211169
##	X2009	33.64535162	43.55871971	3.538912053	-0.152532563
##	X2010	33.5452081	43.08771554	8.01596737	-0.201909423
##	X2011	33.62557806	48.84018447	8.669483012	-0.109467715
##	X2012	33.70594801	47.31202305	8.63218138	-0.20431897
##	X2013	33.78631797	45.87418024	4.051746329	-0.166998431
##	X2014	33.86668793	50.54557398	6.377978893	0.067863934
##	X2015	34.39516585	34.4763957625	4.205955476	-0.006698806
##	X2016	34.34411	34.4763957625	5.053624893	-0.027842298
##	X2017	34.29305414	34.4763957625	6.460681271	-0.174448192
##	X2018	34.25804992	34.4763957625	2.310084252	-0.2565341
##	X2019	34.20671025	34.4763957625	-0.220483886	-0.124889262
##	X2020	34.15809893	34.4763957625	-4.624515816	-0.078914493
##	X2021	34.10701584	34.4763957625	3.512224555	-0.114498667
##	X2022	34.714007370625	34.4763957625	-7.823977326	-0.391204476
##	X2023	34.714007370625	34.4763957625	4.40496797318033	-0.1827458495
##		X29	X30	X33	X34
##	X1960	8.75254901960784	0.0382352941176471	10.4961961966154	58.6638125
##	X1961	8.75254901960784	0.0382352941176471	10.4961961966154	58.6638125
##	X1962	8.75254901960784	0.0382352941176471	10.4961961966154	58.6638125
##	X1963	8.75254901960784	0.0382352941176471	10.4961961966154	58.6638125
##	X1964	8.75254901960784	0.0382352941176471	10.4961961966154	58.6638125
##	X1965	8.75254901960784	0.0382352941176471	10.4961961966154	58.6638125
##	X1966	8.75254901960784	0.0382352941176471	10.4961961966154	58.6638125
##	X1967	8.75254901960784	0.0382352941176471	10.4961961966154	58.6638125
##	X1968	8.75254901960784	0.0382352941176471	10.4961961966154	58.6638125
##	X1969	8.75254901960784	0.0382352941176471	10.4961961966154	58.6638125
##	X1970	2.49	0	10.4961961966154	58.6638125
##	X1971	1.31	0.09	10.4961961966154	58.6638125
##	X1972	1.04	0.02	10.4961961966154	58.6638125

## X1973	7.04	0	10.4961961966154	58.6638125
## X1974	1.27	0.24	10.4961961966154	58.6638125
## X1975	1.64	0.52	10.4961961966154	58.6638125
## X1976	1.78	0.16	10.4961961966154	58.6638125
## X1977	0.98	0	10.4961961966154	58.6638125
## X1978	2.75	0.02	10.4961961966154	58.6638125
## X1979	8.06	0	10.4961961966154	58.6638125
## X1980	13.4	0	10.4961961966154	58.6638125
## X1981	5.29	0.04	10.4961961966154	58.6638125
## X1982	4.38	0.01	10.4961961966154	58.6638125
## X1983	17.5	0.05	10.4961961966154	58.6638125
## X1984	3.34	0	10.4961961966154	58.6638125
## X1985	6.87	0	10.4961961966154	58.6638125
## X1986	5.17	0	10.4961961966154	58.6638125
## X1987	9.3	0	10.4961961966154	58.6638125
## X1988	9.8	0	10.4961961966154	58.6638125
## X1989	5.17	0.04	10.4961961966154	58.6638125
## X1990	5.39	0.02	0	65.198
## X1991	10.15	0	0	62.672
## X1992	2.96	0.09	0	60.091
## X1993	7.01	0.12	0	60.25
## X1994	6.81	0	0.002765448	60.67
## X1995	3.69	0	0.005484436	58.333
## X1996	7.42	0	0.054464499	58.956
## X1997	4.29	0	0.162464548	58.822
## X1998	28.6	0	0.296351104	62.826
## X1999	1.15	0	0.348414425	61.199
## X2000	4.23	0	0.647410011	59.354
## X2001	6.28	0.02	0.793821864	59.1
## X2002	6.04	0	1.050422706	58.852
## X2003	10.51	0	1.458580228	58.61
## X2004	6.91	0	1.44615998	58.369
## X2005	14.87	0	1.792046794	58.132
## X2006	8.94	0	2.537566129	57.903
## X2007	11.81	0	3.88	57.695
## X2008	5.59	0	10.4961961966154	57.495
## X2009	13.95	0	10.4961961966154	57.293
## X2010	20.97	0	10.4961961966154	57.089
## X2011	7.08	0.47	10.4961961966154	56.703
## X2012	8.61	0	10.4961961966154	56.377
## X2013	12.89	0	10.4961961966154	57.538
## X2014	13.3	0	10.5	57.329
## X2015	13.43	0	15.26	57.93
## X2016	25.82	0	22.19	58.031
## X2017	21.73	0	32.25	58.377
## X2018	4.39	0.04	46.9	56.297
## X2019	23.92	0	50.68732735	56.864
## X2020	19.06	0	36.18473435	56.182
## X2021	8.75254901960784	0.0382352941176471	44.45308724	56.705
## X2022	8.75254901960784	0.0382352941176471	10.4961961966154	58.6638125

##	X2023	8.75254901960784	0.0382352941176471	10.4961961966154	58.6638125
##		X35	X36	X37	X40
##	X1960	30.1135945363636	86.9422702777419	60.699	0.548964141548387
##	X1961	30.1135945363636	86.9422702777419	61.328	0.548964141548387
##	X1962	30.1135945363636	86.9422702777419	61.733	0.548964141548387
##	X1963	30.1135945363636	86.9422702777419	61.976	0.548964141548387
##	X1964	30.1135945363636	86.9422702777419	62.174	0.548964141548387
##	X1965	30.1135945363636	86.9422702777419	62.637	0.548964141548387
##	X1966	30.1135945363636	86.9422702777419	63.055	0.548964141548387
##	X1967	30.1135945363636	86.9422702777419	63.51	0.548964141548387
##	X1968	30.1135945363636	86.9422702777419	63.777	0.548964141548387
##	X1969	30.1135945363636	86.9422702777419	63.993	0.548964141548387
##	X1970	30.1135945363636	86.9422702777419	65.267	0.548964141548387
##	X1971	30.1135945363636	86.9422702777419	65.922	0.548964141548387
##	X1972	30.1135945363636	86.9422702777419	65.828	0.548964141548387
##	X1973	30.1135945363636	86.9422702777419	65.939	0.548964141548387
##	X1974	30.1135945363636	86.9422702777419	65.999	0.548964141548387
##	X1975	30.1135945363636	86.9422702777419	66.237	0.548964141548387
##	X1976	30.1135945363636	86.9422702777419	66.513	0.548964141548387
##	X1977	30.1135945363636	86.9422702777419	66.551	0.548964141548387
##	X1978	30.1135945363636	86.9422702777419	67.566	0.548964141548387
##	X1979	30.1135945363636	86.9422702777419	68.13	0.548964141548387
##	X1980	30.1135945363636	86.9422702777419	68.661	0.548964141548387
##	X1981	30.1135945363636	86.9422702777419	69.212	0.548964141548387
##	X1982	30.1135945363636	86.9422702777419	69.674	0.548964141548387
##	X1983	30.1135945363636	86.9422702777419	70.068	0.548964141548387
##	X1984	30.1135945363636	86.9422702777419	70.649	0.548964141548387
##	X1985	30.1135945363636	86.9422702777419	70.969	0.548964141548387
##	X1986	30.1135945363636	86.9422702777419	71.421	0.548964141548387
##	X1987	30.1135945363636	86.9422702777419	71.457	0.548964141548387
##	X1988	30.1135945363636	86.9422702777419	71.549	0.548964141548387
##	X1989	30.1135945363636	86.9422702777419	69.761	0.548964141548387
##	X1990	30.1135945363636	68.50631136	71.927	1.03740662
##	X1991	30.1135945363636	70.77952314	71.751	1.010712499
##	X1992	30.1135945363636	73.05273492	72.53	1.022142925
##	X1993	30.1135945363636	75.3259467	73.052	1.031415237
##	X1994	30.1135945363636	77.59915849	72.882	1.022614329
##	X1995	30.1135945363636	79.87237027	72.26	1.019428227
##	X1996	30.1135945363636	82.14558205	72.261	0.867446707
##	X1997	30.1135945363636	84.41879383	72.136	0.753663196
##	X1998	30.1135945363636	86.69200561	72.081	0.599368088
##	X1999	30.1135945363636	88.96521739	72.618	0.505501057
##	X2000	30.3129681	91.23842917	70.355	0.388737925
##	X2001	30.0629608	91.14782609	70.787	0.377095092
##	X2002	30.0632276	91.057223	71.117	0.378549086
##	X2003	29.5626075	90.96661992	71.373	0.391717117
##	X2004	30.1880041	90.87601683	67.091	0.36694334
##	X2005	29.9381468	90.78541374	72.118	0.395035561
##	X2006	29.8126621	90.78541374	71.969	0.392726121
##	X2007	29.9378525	90.78541374	72.049	0.379260408

## X2008	29.4379894	90.78541374	71.729	0.408583178
## X2009	30.1868988	90.78541374	69.187	0.39588845
## X2010	30.1866478	90.78541374	73.215	0.41574224
## X2011	29.9367092	90.78541374	73.38	0.407133765
## X2012	30.563757	90.78541374	73.906	0.404680484
## X2013	29.8122304	90.78541374	74.239	0.413327825
## X2014	30.6873576	90.78541374	74.651	0.366474589
## X2015	29.5615913	90.78541374	74.927	0.409825958
## X2016	30.6879203	90.78541374	75.331	0.385750502
## X2017	30.4378643	90.78541374	75.403	0.343281236
## X2018	30.1871765	90.78541374	75.748	0.378924579
## X2019	30.5613336	90.78541374	76.008	0.366301582
## X2020	30.6875471	90.78541374	76.393	0.382210465
## X2021	29.685627	86.9422702777419	69.6185081967213	0.548964141548387
## X2022	30.1135945363636	86.9422702777419	69.6185081967213	0.548964141548387
## X2023	30.1135945363636	86.9422702777419	69.6185081967213	0.548964141548387
##	X41	X42	X43	X44
## X1960	93.9	-12606	0.120900576774194	124.8
## X1961	89.7	-11097	0.120900576774194	124.8
## X1962	86.9	-9899	0.120900576774194	124.8
## X1963	84.8	-9202	0.120900576774194	124.8
## X1964	82.9	-8695	0.120900576774194	124.8
## X1965	80.8	-8295	0.120900576774194	124.8
## X1966	78.2	-7899	0.120900576774194	124.8
## X1967	75.5	-7693	0.120900576774194	124.8
## X1968	73.1	-8198	0.120900576774194	124.8
## X1969	71.4	-11304	0.120900576774194	124.8
## X1970	70.1	-16297	0.120900576774194	124.8
## X1971	69.3	-22014	0.120900576774194	124.8
## X1972	68.5	-27097	0.120900576774194	124.8
## X1973	67.5	-30602	0.120900576774194	124.8
## X1974	66.1	-33995	0.120900576774194	124.8
## X1975	64	-37505	0.120900576774194	124.8
## X1976	61.1	-41298	0.120900576774194	124.8
## X1977	57.7	-45398	0.120900576774194	124.8
## X1978	53.8	-50197	0.120900576774194	124.8
## X1979	49.9	-57696	0.120900576774194	124.8
## X1980	46.2	-66398	0.120900576774194	11
## X1981	43	-74202	0.120900576774194	6
## X1982	40	-78992	0.120900576774194	12
## X1983	36.8	-78295	0.120900576774194	16
## X1984	33.4	-68489	0.120900576774194	16
## X1985	30.2	-53596	0.120900576774194	28
## X1986	27.4	-38793	0.120900576774194	26
## X1987	25.2	-28905	0.120900576774194	41
## X1988	23.8	-27896	0.120900576774194	26
## X1989	27.1	-30997	0.120900576774194	28
## X1990	22.8	-36199	0.116510197	23
## X1991	22.5	-42400	0.111609646	33
## X1992	22	-48501	0.115281989	36

## X1993	21.4	-54206	0.119559627	49
## X1994	20.7	-63104	0.121913158	36
## X1995	19.9	-73695	0.118200385	76
## X1996	19.2	-83689	0.115714043	50
## X1997	18.5	-90691	0.116383576	81
## X1998	17.8	-92990	0.115045838	54
## X1999	17.1	-92896	0.124204904	119
## X2000	16.5	-91900	0.121581942	71
## X2001	16	-15604	0.11983065	120
## X2002	15.6	-20309	0.129485082	123
## X2003	15.1	-20932	0.118102699	95
## X2004	28.9	-1028	0.120772376	120
## X2005	14.1	-36955	0.129606039	149
## X2006	13.4	-23795	0.126540831	153
## X2007	12.6	-19572	0.121067932	151
## X2008	12	-11557	0.136971297	201
## X2009	20.9	5484	0.12688282	202
## X2010	11.2	-26603	0.125492681	225
## X2011	10.8	-13277	0.136213299	194
## X2012	10.4	-97095	0.123729085	124.8
## X2013	9.9	-97189	0.113320547	328
## X2014	9.3	-97807	0.137615548	124.8
## X2015	8.8	-98598	0.120310266	218
## X2016	8.3	-98896	0.110461799	280
## X2017	7.9	-98598	0.10139554	277
## X2018	7.6	-97100	0.094259116	343
## X2019	7.3	-94897	0.115815766	356
## X2020	7	-92400	0.144039202	353
## X2021	6.7	-46402.4426229508	0.120900576774194	266
## X2022	36.2983870967742	-46402.4426229508	0.120900576774194	124.8
## X2023	36.2983870967742	-46402.4426229508	0.120900576774194	124.8
##	X45	X48	X49	
X50				
## X1960	46.3974370717391	-0.841220938208333	4.674126188	
269.180290632787				
## X1961	46.3974370717391	-0.841220938208333	4.515535069	
159.8291819				
## X1962	46.3974370717391	-0.841220938208333	4.382517209	
163.7229628				
## X1963	46.3974370717391	-0.841220938208333	4.270774399	
167.716967				
## X1964	46.3974370717391	-0.841220938208333	4.181658464	
171.8081008				
## X1965	46.3974370717391	-0.841220938208333	4.117564809	
175.972317				
## X1966	46.3974370717391	-0.841220938208333	4.078219981	
180.1900973				
## X1967	46.3974370717391	-0.841220938208333	4.060333378	
184.5161537				
## X1968	46.3974370717391	-0.841220938208333	4.059082547	

188.914288	
## X1969 46.3974370717391 -0.841220938208333	4.070150795
193.2579652	
## X1970 46.3974370717391 -0.841220938208333	4.10176346
197.5565141	
## X1971 46.3974370717391 -0.841220938208333	4.158802793
201.7963802	
## X1972 46.3974370717391 -0.841220938208333	4.223716104
205.9393558	
## X1973 46.3974370717391 -0.841220938208333	4.28881002
210.0101579	
## X1974 46.3974370717391 -0.841220938208333	4.360109302
213.9734652	
## X1975 46.3974370717391 -0.841220938208333	4.4368046
217.8739117	
## X1976 46.3974370717391 -0.841220938208333	4.516307134
221.8174135	
## X1977 46.3974370717391 -0.841220938208333	4.595660621
225.7861904	
## X1978 46.3974370717391 -0.841220938208333	4.680205584
229.8647106	
## X1979 46.3974370717391 -0.841220938208333	4.770538406
234.0996173	
## X1980 46.3974370717391 -0.841220938208333	4.863422039
238.2976399	
## X1981 46.3974370717391 -0.841220938208333	4.961270927
242.3683304	
## X1982 46.3974370717391 -0.841220938208333	5.065496546
246.1928401	
## X1983 46.3974370717391 -0.841220938208333	5.179078315
249.6960931	
## X1984 46.3974370717391 -0.841220938208333	5.302947804
253.1107798	
## X1985 46.3974370717391 -0.841220938208333	5.432492159
256.615181	
## X1986 46.3974370717391 -0.841220938208333	5.564626659
260.2136023	
## X1987 46.3974370717391 -0.841220938208333	5.697640541
263.8676288	
## X1988 46.3974370717391 -0.841220938208333	5.830185779
267.4810397	
## X1989 46.3974370717391 -0.841220938208333	5.959003566
270.9388455	
## X1990 46.3974370717391 -0.841220938208333	6.086931983
274.3437091	
## X1991 46.3974370717391 -0.841220938208333	6.218129357
277.7323553	
## X1992 46.3974370717391 -0.841220938208333	6.351117654
281.0469941	
## X1993 46.3974370717391 -0.841220938208333	6.485449321

284.2546803			
## X1994	46.3974370717391	-0.841220938208333	6.611428077
287.2228353			
## X1995	46.3974370717391	-0.841220938208333	6.724638287
289.8671982			
## X1996	46.3974370717391	-1.778298974	6.827736883
292.1783767			
## X1997	46.3974370717391	-0.841220938208333	6.921510766
294.1974645			
## X1998	46.3974370717391	-1.48284018	7.008346489
295.978281			
## X1999	46.3974370717391	-0.841220938208333	7.095979111
297.7262159			
## X2000	44.69059975	-1.904112697	7.145760488
299.4158986			
## X2001	44.82000549	-0.841220938208333	7.150429896
301.7106522			
## X2002	44.94892689	-0.777628899	7.158304168
304.7473609			
## X2003	45.07835542	-0.833158433	7.172535821
307.8166162			
## X2004	45.20779762	-1.010440588	7.187593748
310.8025993			
## X2005	45.33675343	-1.152236819	7.208667071
313.7277308			
## X2006	45.52626264	-1.421550751	7.241204716
316.8666241			
## X2007	45.71533013	-1.751283646	7.314207732
320.1826662			
## X2008	45.90495644	-1.798595548	7.410061081
323.4833838			
## X2009	46.09464219	-1.340903044	7.517621221
326.6221815			
## X2010	46.28387278	-0.942946851	7.642611247
329.5894913			
## X2011	46.47367028	-0.72477144	7.783559648
332.6382236			
## X2012	46.66352846	-0.717079222	8.004150135
335.1482539			
## X2013	46.86227995	-0.612895429	8.303095864
336.9758571			
## X2014	47.0706	-0.330464035	8.634274407
338.6933025			
## X2015	47.28864635	0.083182663	8.986503183
344.7352205			
## X2016	47.51605689	-0.01134005	9.336979581
346.1699061			
## X2017	47.75351269	-0.07544852	9.696994848
347.4837704			
## X2018	48.00170885	-0.139389724	10.07474499

350.284495
 ## X2019 47.82528978 -0.215569809 10.44922221
 352.4316946
 ## X2020 47.5914243 -0.089156918 10.8029791
 354.3323634
 ## X2021 47.35929945 -0.376803756 6.21232154559016
 358.1635952
 ## X2022 47.12753287 -0.785569847 6.21232154559016
 269.180290632787
 ## X2023 46.3974370717391 -0.841220938208333 6.21232154559016
 269.180290632787

##	X52	X53	X55	X56
## X1960	13.6261904761905	11.1952380952381	5.35583790066667	47.91984534
## X1961	13.6261904761905	11.1952380952381	5.35583790066667	47.91984534
## X1962	13.6261904761905	11.1952380952381	5.35583790066667	47.91984534
## X1963	13.6261904761905	11.1952380952381	5.35583790066667	47.91984534
## X1964	13.6261904761905	11.1952380952381	5.35583790066667	47.91984534
## X1965	13.6261904761905	11.1952380952381	5.35583790066667	47.91984534
## X1966	13.6261904761905	11.1952380952381	5.35583790066667	47.91984534
## X1967	13.6261904761905	11.1952380952381	5.35583790066667	47.91984534
## X1968	13.6261904761905	11.1952380952381	5.35583790066667	47.91984534
## X1969	13.6261904761905	11.1952380952381	5.35583790066667	47.91984534
## X1970	13.6261904761905	11.1952380952381	5.35583790066667	47.91984534
## X1971	13.6261904761905	11.1952380952381	5.35583790066667	47.91984534
## X1972	13.6261904761905	11.1952380952381	5.35583790066667	47.91984534
## X1973	13.6261904761905	11.1952380952381	5.35583790066667	47.91984534
## X1974	13.6261904761905	11.1952380952381	5.35583790066667	47.91984534
## X1975	7.3	11.1952380952381	5.35583790066667	47.91984534
## X1976	7.5	11.1952380952381	5.35583790066667	47.91984534
## X1977	7.7	11.1952380952381	5.35583790066667	47.91984534
## X1978	7.9	11.1952380952381	5.35583790066667	47.91984534
## X1979	8.1	11.1952380952381	5.35583790066667	47.91984534
## X1980	8.3	11.1952380952381	5.35583790066667	47.91984534
## X1981	8.5	11.1952380952381	5.35583790066667	47.91984534
## X1982	8.7	11.1952380952381	5.35583790066667	47.91984534
## X1983	8.9	11.1952380952381	5.35583790066667	47.91984534
## X1984	9.2	11.1952380952381	5.35583790066667	47.91984534
## X1985	9.4	11.1952380952381	5.35583790066667	47.91984534
## X1986	9.7	11.1952380952381	5.35583790066667	47.91984534
## X1987	10	11.1952380952381	5.35583790066667	47.91984534
## X1988	10.3	11.1952380952381	5.35583790066667	47.91984534
## X1989	10.6	11.1952380952381	5.35583790066667	47.91984534
## X1990	10.9	11.1952380952381	5.35583790066667	58.16099063
## X1991	11.2	11.1952380952381	5.35583790066667	53.2070671
## X1992	11.5	11.1952380952381	5.35583790066667	48.33671798
## X1993	11.8	11.1952380952381	5.35583790066667	49.65318072
## X1994	12.2	11.1952380952381	5.35583790066667	49.62850366
## X1995	12.5	11.1952380952381	5.35583790066667	47.8415815
## X1996	12.9	11.1952380952381	5.35583790066667	46.92465436
## X1997	13.3	11.1952380952381	5.333333333	46.64513909

## X1998	13.7	11.1952380952381	5.333333333	53.88588197
## X1999	14.1	11.1952380952381	4.888888889	48.60031506
## X2000	14.5	11.1952380952381	5.35583790066667	48.21663238
## X2001	14.9	16.5	5.35583790066667	47.9695769
## X2002	15.4	15.8	4.444444444	47.72463942
## X2003	15.9	15.5	4.444444444	47.4789916
## X2004	16.3	14.9	4.888888889	47.2339118
## X2005	16.8	13.9	4.888888889	46.98806465
## X2006	17.4	13.2	4.888888889	46.74430135
## X2007	17.9	11.8	5.777777778	46.50079848
## X2008	18.4	10.8	5.777777778	46.25752526
## X2009	19	11.5	5.777777778	46.01504366
## X2010	19.6	13	5.333333333	45.77230404
## X2011	20.1	14	5.777777778	46.22820035
## X2012	20.7	13	5.777777778	43.94493931
## X2013	21.3	11.7	5.777777778	47.23343912
## X2014	22	10.2	5.777777778	46.33809492
## X2015	22.6	9.1	4.888888889	47.92310193
## X2016	23.3	8.1	5.777777778	47.67402606
## X2017	13.6261904761905	7.6	5.777777778	49.05363418
## X2018	13.6261904761905	7.1	5.777777778	45.90760629
## X2019	13.6261904761905	6.4	5.333333333	47.16777707
## X2020	13.6261904761905	5.7	5.381165919	46.95895784
## X2021	13.6261904761905	5.3	5.381165919	47.3422413
## X2022	13.6261904761905	11.1952380952381	5.333333333	46.80971442
## X2023	13.6261904761905	11.1952380952381	5.35583790066667	46.90718716
##	X57	X58	X59	X61
## X1960	-0.169238025375	58.3625572215385	61.0051612903226	0.0391435937083333
## X1961	-0.169238025375	58.3625572215385	61.0051612903226	0.0391435937083333
## X1962	-0.169238025375	58.3625572215385	61.0051612903226	0.0391435937083333
## X1963	-0.169238025375	58.3625572215385	61.0051612903226	0.0391435937083333
## X1964	-0.169238025375	58.3625572215385	61.0051612903226	0.0391435937083333
## X1965	-0.169238025375	58.3625572215385	61.0051612903226	0.0391435937083333
## X1966	-0.169238025375	58.3625572215385	61.0051612903226	0.0391435937083333
## X1967	-0.169238025375	58.3625572215385	61.0051612903226	0.0391435937083333
## X1968	-0.169238025375	58.3625572215385	61.0051612903226	0.0391435937083333
## X1969	-0.169238025375	58.3625572215385	61.0051612903226	0.0391435937083333
## X1970	-0.169238025375	58.3625572215385	61.0051612903226	0.0391435937083333
## X1971	-0.169238025375	58.3625572215385	61.0051612903226	0.0391435937083333
## X1972	-0.169238025375	58.3625572215385	61.0051612903226	0.0391435937083333
## X1973	-0.169238025375	58.3625572215385	61.0051612903226	0.0391435937083333
## X1974	-0.169238025375	58.3625572215385	61.0051612903226	0.0391435937083333
## X1975	-0.169238025375	58.3625572215385	61.0051612903226	0.0391435937083333
## X1976	-0.169238025375	58.3625572215385	61.0051612903226	0.0391435937083333
## X1977	-0.169238025375	58.3625572215385	61.0051612903226	0.0391435937083333
## X1978	-0.169238025375	58.3625572215385	61.0051612903226	0.0391435937083333
## X1979	-0.169238025375	58.3625572215385	61.0051612903226	0.0391435937083333
## X1980	-0.169238025375	58.3625572215385	61.0051612903226	0.0391435937083333
## X1981	-0.169238025375	58.3625572215385	61.0051612903226	0.0391435937083333
## X1982	-0.169238025375	58.3625572215385	61.0051612903226	0.0391435937083333

## X1983	-0.169238025375	58.3625572215385	61.0051612903226	0.0391435937083333
## X1984	-0.169238025375	58.3625572215385	61.0051612903226	0.0391435937083333
## X1985	-0.169238025375	58.3625572215385	61.0051612903226	0.0391435937083333
## X1986	-0.169238025375	58.3625572215385	61.0051612903226	0.0391435937083333
## X1987	-0.169238025375	58.3625572215385	61.0051612903226	0.0391435937083333
## X1988	-0.169238025375	58.3625572215385	61.0051612903226	0.0391435937083333
## X1989	-0.169238025375	58.3625572215385	61.0051612903226	0.0391435937083333
## X1990	-0.169238025375	99.84126984	78.09	0.0391435937083333
## X1991	-0.169238025375	92.27124667	77.96	0.0391435937083333
## X1992	-0.169238025375	81.92090395	75.28	0.0391435937083333
## X1993	-0.169238025375	95.40085449	74.19	0.0391435937083333
## X1994	-0.169238025375	93.2072031	70.58	0.0391435937083333
## X1995	-0.169238025375	92.71137026	69.94	0.0391435937083333
## X1996	0.064729966	71.78807947	64.42	0.161260232
## X1997	-0.169238025375	66.99708455	65.91	0.0391435937083333
## X1998	0.155283034	68.88967095	64.15	0.064277157
## X1999	-0.169238025375	67.48059508	63.25	0.0391435937083333
## X2000	0.158748269	45.80239863	64.16	0.159529582
## X2001	-0.169238025375	46.01091284	62.93	0.0391435937083333
## X2002	0.124769226	38.18258784	62.1	0.338851631
## X2003	0.034730762	42.89787455	61.31	0.244941875
## X2004	-0.083361119	36.13843352	61.61	0.21113658
## X2005	-0.423394442	37.22651223	60.08	0.158469424
## X2006	-0.272532344	49	62.18	0.177752674
## X2007	-0.297004074	40.06665993	60.2	0.131876916
## X2008	-0.385201991	41.53923038	61.58	-0.000771665
## X2009	-0.294943988	39.29501302	63.51	-0.101635471
## X2010	-0.248191312	53.11545227	61.85	-0.118414134
## X2011	-0.131351128	40.8474867	56.42	-0.117064774
## X2012	-0.125741094	29.24124023	52.86	-0.114084356
## X2013	-0.166235015	59.8769026	56.88	-0.265588671
## X2014	-0.10895326	39.20231121	54.23	-0.149271369
## X2015	-0.0587589	48.47519345	51.27	0.031726025
## X2016	-0.123026699	58.3625572215385	45.13	0.107241459
## X2017	-0.162157983	58.3625572215385	45.78	0.026702216
## X2018	-0.217681855	58.3625572215385	47.86	-0.00040862
## X2019	-0.232445598	58.3625572215385	46.13	0.039557587
## X2020	-0.225914791	58.3625572215385	49.32	-0.007581946
## X2021	-0.38943544	58.3625572215385	61.0051612903226	0.017869212
## X2022	-0.653642833	58.3625572215385	61.0051612903226	-0.056925315
## X2023	-0.169238025375	58.3625572215385	61.0051612903226	0.0391435937083333
##	X62	X63	X64	X65
X68				
## X1960	103.406911882653	1.01746566143478	595.1344	0.488063226
9897.15				
## X1961	103.406911882653	1.01746566143478	595.1344	2.182796007
9897.15				
## X1962	103.406911882653	1.01746566143478	595.1344	0.326732489
9897.15				
## X1963	103.406911882653	1.01746566143478	595.1344	2.619100977

9897.15					
## X1964	103.406911882653	1.01746566143478	595.1344		-1.559403073
9897.15					
## X1965	103.406911882653	1.01746566143478	595.1344		1.176477931
9897.15					
## X1966	103.406911882653	1.01746566143478	595.1344		-0.001144509
9897.15					
## X1967	103.406911882653	1.01746566143478	595.1344		1.369097433
9897.15					
## X1968	103.406911882653	1.01746566143478	595.1344		-1.686090714
9897.15					
## X1969	103.406911882653	1.01746566143478	595.1344		1.162499662
9897.15					
## X1970	102.6506729	1.01746566143478	595.1344		0.33244915
9897.15					
## X1971	103.9308777	1.01746566143478	595.1344		-0.098921295
9897.15					
## X1972	93.94933319	1.01746566143478	595.1344		0.574022006
9897.15					
## X1973	91.39897156	1.01746566143478	595.1344		0.378145995
9897.15					
## X1974	86.02371216	1.01746566143478	595.1344		-1.810238977
9897.15					
## X1975	83.14100647	1.01746566143478	595.1344		0.523127067
9897.15					
## X1976	82.76790619	0.979610026	595.1344		-1.541389244
9897.15					
## X1977	87.70649719	1.01746566143478	595.1344		1.228919589
9897.15					
## X1978	110.989212	1.01746566143478	595.1344		-0.176417176
9897.15					
## X1979	114.6280365	1.01746566143478	595.1344		0.26170928
9897.15					
## X1980	119.281517	1.01746566143478	595.1344		-1.846115042
9897.15					
## X1981	122.5013199	1.009520054	595.1344		0.171417377
9897.15					
## X1982	122.83004	1.016700029	595.1344		-1.059634503
9897.15					
## X1983	122.4218521	1.015310049	595.1344		-1.716607302
9897.15					
## X1984	122.9664993	1.01797998	595.1344		1.669570749
9897.15					
## X1985	123.7367096	1.017779946	595.1344		0.227684791
9897.15					
## X1986	123.6384201	1.021980047	595.1344		-0.418526682
9897.15					
## X1987	106.7447433	1.021880031	595.1344		-1.872111412
9897.15					
## X1988	107.0434494	1.02125001	595.1344		0.688796935

9897.15				
## X1989	107.9124908	1.021070004	595.1344	-1.142357425
9897.15				
## X1990	108.7706223	1.021209955	595.1344	0.854053847
9897.15				
## X1991	110.8472977	1.026610017	595.1344	-0.881992259
9897.15				
## X1992	110.4095993	1.026720047	595.1344	-1.471579113
9897.15				
## X1993	111.0216827	1.029309988	595.1344	0.746118045
9897.15				
## X1994	110.4600677	1.036720037	595.1344	-0.01705532
9897.15				
## X1995	112.4434509	1.028650045	595.1344	-0.513994124
9897.15				
## X1996	106.88311	1.01746566143478	167.89	-0.051700996
9897.15				
## X1997	103.406911882653	1.01746566143478	212.17	0.840204815
9897.15				
## X1998	105.2663803	1.01746566143478	199.01	-0.895371473
9897.15				
## X1999	103.406911882653	1.01746566143478	208.12	0.070744412
9897.15				
## X2000	103.406911882653	1.01746566143478	209.36	0.121406727
9897.15				
## X2001	104.3644638	1.01746566143478	215.68	-1.239749785
9897.15				
## X2002	102.9921112	1.01746566143478	245.5	-0.249535613
3428				
## X2003	100.4747314	1.01746566143478	263.19	-0.562004116
3149				
## X2004	96.01554108	1.01746566143478	264.94	0.845627821
5599				
## X2005	98.10224152	1.01746566143478	335.1	-0.219753067
4682				
## X2006	97.6338501	1.01746566143478	387.51	1.549134495
7730				
## X2007	96.77477264	1.01746566143478	425.62	-0.685444935
10242				
## X2008	95.73592377	1.01746566143478	510.61	1.153134122
6500				
## X2009	93.38205719	1.01746566143478	480.68	-0.926371443
13975				
## X2010	97.78184509	0.997380018	483.08	0.524111099
7231				
## X2011	97.40403748	0.995890021	545.68	-0.835214098
14737				
## X2012	97.17951965	1.018329978	606.52	-0.197111264
14428				
## X2013	97.27497864	1.017470002	722.62	-0.981518138

7953					
## X2014	97.43370056	1.01746566143478	676.42		0.510976154
12350					
## X2015	97.52911377	1.01746566143478	740.94		2.044603786
7403					
## X2016	97.93824768	1.011459947	1116.44		-1.598018362
17490					
## X2017	97.64884186	1.024719954	1136.75		-0.362928222
13066					
## X2018	97.27960205	1.024160028	1344.09		0.229931952
13161					
## X2019	97.27720642	1.01746566143478	1600.97		0.5399457
10307					
## X2020	97.47866058	1.01746566143478	1779.47		-0.735113259
11216					
## X2021	96.87175751	1.01746566143478	595.1344		1.261632326
13296					
## X2022	103.406911882653	1.01746566143478	595.1344	-0.0109867254193548	
9897.15					
## X2023	103.406911882653	1.01746566143478	595.1344	-0.0109867254193548	
9897.15					
##	X69	X71			
## X1960	7.50072727272727	-0.274760096375			
## X1961	7.50072727272727	-0.274760096375			
## X1962	7.50072727272727	-0.274760096375			
## X1963	7.50072727272727	-0.274760096375			
## X1964	7.50072727272727	-0.274760096375			
## X1965	7.50072727272727	-0.274760096375			
## X1966	7.50072727272727	-0.274760096375			
## X1967	7.50072727272727	-0.274760096375			
## X1968	7.50072727272727	-0.274760096375			
## X1969	7.50072727272727	-0.274760096375			
## X1970	7.50072727272727	-0.274760096375			
## X1971	7.50072727272727	-0.274760096375			
## X1972	7.50072727272727	-0.274760096375			
## X1973	7.50072727272727	-0.274760096375			
## X1974	7.50072727272727	-0.274760096375			
## X1975	7.50072727272727	-0.274760096375			
## X1976	7.50072727272727	-0.274760096375			
## X1977	7.50072727272727	-0.274760096375			
## X1978	7.50072727272727	-0.274760096375			
## X1979	7.50072727272727	-0.274760096375			
## X1980	7.50072727272727	-0.274760096375			
## X1981	7.50072727272727	-0.274760096375			
## X1982	7.50072727272727	-0.274760096375			
## X1983	7.50072727272727	-0.274760096375			
## X1984	7.50072727272727	-0.274760096375			
## X1985	7.50072727272727	-0.274760096375			
## X1986	7.50072727272727	-0.274760096375			
## X1987	7.50072727272727	-0.274760096375			

```
## X1988 7.50072727272727 -0.274760096375
## X1989 7.50072727272727 -0.274760096375
## X1990 7.50072727272727 -0.274760096375
## X1991 14.66 -0.274760096375
## X1992 14.22 -0.274760096375
## X1993 13.82 -0.274760096375
## X1994 13.03 -0.274760096375
## X1995 12.27 -0.274760096375
## X1996 11.35 -0.269144207
## X1997 10.6 -0.274760096375
## X1998 9.17 -0.150950506
## X1999 8.88 -0.274760096375
## X2000 7.74 -0.190723956
## X2001 7.9 -0.274760096375
## X2002 8.76 -0.088549092
## X2003 8.22 -0.092452683
## X2004 8.38 -0.164139301
## X2005 7.67 -0.206795961
## X2006 6.5 -0.310158849
## X2007 5.97 -0.435254872
## X2008 5.22 -0.464874476
## X2009 5.85 -0.480314404
## X2010 4.78 -0.505228579
## X2011 4.12 -0.545052946
## X2012 3.88 -0.575279295
## X2013 4.24 -0.594175637
## X2014 4.19 -0.667191744
## X2015 4.52 -0.29613018
## X2016 4.24 -0.081050552
## X2017 4.05 -0.061878327
## X2018 4.32 -0.008067985
## X2019 4.67 -0.089097887
## X2020 5.2 -0.052087277
## X2021 5.239 -0.074099243
## X2022 6.705 -0.191544354
## X2023 7.16 -0.274760096375
```

#Create data frame to Bangladesh

```
dfBA<-data.frame(df1)
```

```
dfBA<-df1[df1$Country.Code=="BGD",]
```

```
Bangladesh<-data.frame(t(dfBA[1:71,5:68]))
```

```
Bangladesh<-Bangladesh[1:64,1:51]
```

```
Bangladesh
```

```
##          X72          X73          X74
X75
## X1960 14.6727272727273 49.2864151993548 0.696519304693878
0.392837167408163
## X1961 14.6727272727273 49.2864151993548 0.696519304693878
```


0.392837167408163
X1962 14.6727272727273 49.2864151993548 0.696519304693878
0.392837167408163
X1963 14.6727272727273 49.2864151993548 0.696519304693878
0.392837167408163
X1964 14.6727272727273 49.2864151993548 0.696519304693878
0.392837167408163
X1965 14.6727272727273 49.2864151993548 0.696519304693878
0.392837167408163
X1966 14.6727272727273 49.2864151993548 0.696519304693878
0.392837167408163
X1967 14.6727272727273 49.2864151993548 0.696519304693878
0.392837167408163
X1968 14.6727272727273 49.2864151993548 0.696519304693878
0.392837167408163
X1969 14.6727272727273 49.2864151993548 0.696519304693878
0.392837167408163
X1970 14.6727272727273 49.2864151993548 0.696519304693878
0.392837167408163
X1971 14.6727272727273 49.2864151993548 0.696519304693878
0.392837167408163
X1972 14.6727272727273 49.2864151993548 0.696519304693878
0.392837167408163
X1973 14.6727272727273 49.2864151993548 0.494222799
0.490252063
X1974 14.6727272727273 49.2864151993548 0.378011115
0.371263318
X1975 14.6727272727273 49.2864151993548 0.556095947
0.552191759
X1976 14.6727272727273 49.2864151993548 0.675238457
0.66345781
X1977 14.6727272727273 49.2864151993548 2.448037456
2.431330958
X1978 14.6727272727273 49.2864151993548 1.762573844
1.75248996
X1979 14.6727272727273 49.2864151993548 0.642436096
0.629615794
X1980 14.6727272727273 49.2864151993548 0.680348746
0.662975093
X1981 14.6727272727273 49.2864151993548 0.52579115
0.519869394
X1982 14.6727272727273 49.2864151993548 0.855190542
0.852081425
X1983 14.6727272727273 49.2864151993548 0.605602779
0.584294674
X1984 14.6727272727273 49.2864151993548 0.497304699
0.478112047
X1985 14.6727272727273 49.2864151993548 0.306326215
0.286299926
X1986 14.6727272727273 49.2864151993548 0.550563252

0.514096227			
## X1987 14.6727272727273 49.2864151993548			0.464841903
0.420278478			
## X1988 14.6727272727273 49.2864151993548			0.461315382
0.421991159			
## X1989 14.6727272727273 49.2864151993548			0.427691755
0.385929159			
## X1990 14.6727272727273 49.2864151993548			0.473938238
0.41394344			
## X1991 14.6727272727273	14.29		0.46589108
0.423377772			
## X1992 14.6727272727273	9.90541935		0.516139088
0.417003636			
## X1993 14.6727272727273	12.71788025		0.441659835
0.326188659			
## X1994 14.6727272727273	17.8		0.43234273
0.286284819			
## X1995 14.6727272727273	18.33804512		0.496535705
0.321521295			
## X1996 14.6727272727273	21.14438629		0.428134126
0.261674673			
## X1997 14.6727272727273	22.4		0.365634969
0.21644452			
## X1998 14.6727272727273	26.74619293		0.378209195
0.207065431			
## X1999 14.6727272727273	29.54021454		0.437725476
0.209212906			
## X2000	7.8	32	0.588788273
0.194678443			
## X2001	8	35.03246689	0.612299974
0.191367933			
## X2002	8.3	37.7541275	0.73715047
0.180091077			
## X2003	8.5	40.47424698	0.70093506
0.186247914			
## X2004	8.9	40.6	0.762644905
0.172703674			
## X2005	9.3	44.23	0.871723232
0.158799765			
## X2006	9.9	50.52510246	1.077387537
0.209621449			
## X2007	10.4	46.5	0.92073067
0.310121303			
## X2008	11.1	54.26874542	0.881301429
0.243505819			
## X2009	11.8	57.07751465	0.843648626
0.210047378			
## X2010	12.7	55.26	1.049267655
0.341808536			
## X2011	13.6	59.6	1.169091948

0.324659287			
## X2012	14.7	65.54574585	1.191139484
0.26631545			
## X2013	15.8	61.5	0.906559975
0.192264735			
## X2014	17	62.4	0.847423438
0.180660592			
## X2015	18.1	74.00247192	0.761525249
0.196703062			
## X2016	19.3	75.92	0.625475019
0.172691441			
## X2017	20.6	88	0.62447832
0.132523511			
## X2018	22	86.9152832	0.575874618
0.067921183			
## X2019	23.5	92.2	0.573818678
0.068674636			
## X2020	25	96.2	0.504155309
0.076942585			
## X2021	26.5	98.99102783	0.536223482
0.071425035			
## X2022	14.6727272727273	49.2864151993548	0.696519304693878
0.392837167408163			
## X2023	14.6727272727273	49.2864151993548	0.696519304693878
0.392837167408163			

##	X76	X77	X82	X84
## X1960	74.2957922618033	57.47431238	0.28097284816129	-1.08209660654167
## X1961	72.82784052	57.98823595	0.28097284816129	-1.08209660654167
## X1962	72.80479373	57.01857402	0.28097284816129	-1.08209660654167
## X1963	72.82784052	57.14666817	0.28097284816129	-1.08209660654167
## X1964	73.13513098	53.35683665	0.28097284816129	-1.08209660654167
## X1965	74.0339556	52.81869477	0.28097284816129	-1.08209660654167
## X1966	74.133825	53.94737058	0.28097284816129	-1.08209660654167
## X1967	74.47952677	55.85247837	0.28097284816129	-1.08209660654167
## X1968	74.27978797	53.55573997	0.28097284816129	-1.08209660654167
## X1969	74.32588154	55.41281892	0.28097284816129	-1.08209660654167
## X1970	74.4948913	54.56149999	0.28097284816129	-1.08209660654167
## X1971	74.47952677	51.03131121	0.28097284816129	-1.08209660654167
## X1972	76.75347622	59.609906	0.28097284816129	-1.08209660654167
## X1973	76.7381117	56.638853	0.28097284816129	-1.08209660654167
## X1974	76.7381117	56.63655312	0.28097284816129	-1.08209660654167
## X1975	76.85334562	61.95413913	0.28097284816129	-1.08209660654167
## X1976	76.80725206	51.91445693	0.28097284816129	-1.08209660654167
## X1977	76.75347622	48.89805693	0.28097284816129	-1.08209660654167
## X1978	76.72274718	54.2503083	0.28097284816129	-1.08209660654167
## X1979	76.69201813	52.45201206	0.28097284816129	-1.08209660654167
## X1980	76.72274718	32.82389185	0.28097284816129	-1.08209660654167
## X1981	76.67665361	31.95151692	0.28097284816129	-1.08209660654167
## X1982	76.65360682	31.44169633	0.28097284816129	-1.08209660654167
## X1983	76.54605516	31.04603046	0.28097284816129	-1.08209660654167

## X1984	77.28355228	34.69863208	0.28097284816129	-1.08209660654167
## X1985	77.03003764	33.00673157	0.28097284816129	-1.08209660654167
## X1986	77.13758931	32.36915289	0.28097284816129	-1.08209660654167
## X1987	77.70607667	32.66390093	0.28097284816129	-1.08209660654167
## X1988	80.10294231	31.3191778	0.28097284816129	-1.08209660654167
## X1989	80.22585849	30.56164284	0.28097284816129	-1.08209660654167
## X1990	79.78796958	30.4898331	0.107550001	-1.08209660654167
## X1991	79.28094031	31.67702324	0.099143894	-1.08209660654167
## X1992	73.35791657	30.51752524	0.106257362	-1.08209660654167
## X1993	72.56664362	27.32108582	0.110814122	-1.08209660654167
## X1994	71.89060459	26.72553755	0.117142782	-1.08209660654167
## X1995	72.01352078	27.3043698	0.140538338	-1.08209660654167
## X1996	71.65245448	23.26620805	0.140354851	-0.969682217
## X1997	71.94438043	23.24614375	0.1554492	-1.08209660654167
## X1998	72.47445648	22.58741576	0.154800379	-0.773010969
## X1999	72.87393409	22.65841112	0.158617237	-1.08209660654167
## X2000	72.21325958	22.71814808	0.160122047	-1.212082624
## X2001	72.23630637	21.84834058	0.194686761	-1.08209660654167
## X2002	71.85219329	20.58413442	0.203401188	-1.449086785
## X2003	71.66013674	19.8127183	0.209737198	-1.54172051
## X2004	71.62172544	19.26695957	0.219955044	-1.597114921
## X2005	71.5295383	18.57103955	0.232135397	-1.406466603
## X2006	71.29138818	18.03401651	0.251721898	-1.442982793
## X2007	71.18383652	17.80653678	0.263586595	-1.063239932
## X2008	71.08396712	17.59569554	0.285933318	-1.046788335
## X2009	71.03019129	17.10462905	0.305030148	-1.075251222
## X2010	70.99177998	17.00118126	0.340233253	-1.054080248
## X2011	70.12368441	16.80998676	0.361557397	-1.097388625
## X2012	70.0852731	16.17756317	0.387829235	-0.85661906
## X2013	71.27602366	15.493278	0.408788179	-0.893825352
## X2014	71.59867865	15.3516209	0.425189457	-0.892129958
## X2015	72.47630022	14.78299644	0.463517075	-0.84402591
## X2016	73.11369747	13.46479232	0.507739271	-0.886878014
## X2017	73.45263886	12.95727549	0.541787826	-0.858938634
## X2018	73.95943766	12.4800786	0.586157625	-0.926946819
## X2019	75.83928709	11.97532192	0.559733656	-1.016993523
## X2020	76.26949374	11.99968686	0.510647559	-1.003677249
## X2021	77.34501037	11.63285843	0.28097284816129	-0.985860944
## X2022	74.2957922618033	11.21760104	0.28097284816129	-1.07552731
## X2023	74.2957922618033	32.775892271746	0.28097284816129	-1.08209660654167
##	X85	X87	X88	X89
## X1960	4557.79196078431	0.483362136977778	16.6323664788636	2.43285714285714
## X1961	4557.79196078431	0.483362136977778	16.6323664788636	2.43285714285714
## X1962	4557.79196078431	0.483362136977778	16.6323664788636	2.43285714285714
## X1963	4557.79196078431	0.483362136977778	16.6323664788636	2.43285714285714
## X1964	4557.79196078431	0.483362136977778	16.6323664788636	2.43285714285714
## X1965	4557.79196078431	0.483362136977778	16.6323664788636	2.43285714285714
## X1966	4557.79196078431	0.483362136977778	16.6323664788636	2.43285714285714
## X1967	4557.79196078431	0.483362136977778	16.6323664788636	2.43285714285714
## X1968	4557.79196078431	0.483362136977778	16.6323664788636	2.43285714285714

## X1969	4557.79196078431	0.483362136977778	16.6323664788636	2.43285714285714
## X1970	4416.17	0.483362136977778	16.6323664788636	2.43285714285714
## X1971	3994.31	0	14.72921988	2.43285714285714
## X1972	4557.09	0	14.26764802	2.43285714285714
## X1973	4464.71	0	15.90479941	2.43285714285714
## X1974	4256.45	0	16.55461824	2.43285714285714
## X1975	4339.78	0	18.90995791	2.43285714285714
## X1976	4442.66	0	19.17095853	2.43285714285714
## X1977	4269.88	0	17.77304222	2.43285714285714
## X1978	4291.33	0	18.49855792	2.43285714285714
## X1979	4827.99	0	18.69670663	2.43285714285714
## X1980	4483.53	0	19.72450395	2.43285714285714
## X1981	4242.06	0	19.7789247	2.43285714285714
## X1982	4388.23	0	19.06439153	2.43285714285714
## X1983	4337.3	0	16.11291431	2.43285714285714
## X1984	4321.57	0	15.26464532	2.43285714285714
## X1985	4483.24	0	15.40536564	2.43285714285714
## X1986	4446.18	0	15.98367514	2.43285714285714
## X1987	4638.75	0	16.2803615	2.43285714285714
## X1988	4583.85	0	14.76075318	2.43285714285714
## X1989	4453.33	0	15.46255768	2.43285714285714
## X1990	4351.07	0	15.52917165	2.43285714285714
## X1991	4427.21	0	13.6058125	2.43285714285714
## X1992	4467.36	0	14.24014664	2.43285714285714
## X1993	4305.5	0	14.55445518	2.43285714285714
## X1994	4521.64	0	14.77714667	2.43285714285714
## X1995	4654.06	0	19.65540442	2.43285714285714
## X1996	4597.97	0	18.95421723	2.43285714285714
## X1997	4291.45	0	21.59469902	2.43285714285714
## X1998	4644.62	0	21.33620505	2.43285714285714
## X1999	4712.82	0	18.18558554	2.43285714285714
## X2000	4386.88	0	17.0074181	2.61
## X2001	4557.73	0	18.82014454	2.76
## X2002	4503.77	0	18.05880742	2.69
## X2003	4578.17	0	18.47023522	2.7
## X2004	4625.25	0	16.02871434	2.62
## X2005	4775.68	0.616326994	15.0473542	2.58
## X2006	4893.18	0.934611087	13.7245534	2.58
## X2007	4601.18	2.389937107	13.63414016	2.51
## X2008	4693.05	3.214682331	12.82179658	2.48
## X2009	4994.44	2.937299944	12.3584576	2.48
## X2010	5075.27	1.89262074	14.52870358	2.47
## X2011	4643.4	1.87303241	16.93574126	2.4
## X2012	4693.24	1.927432972	17.79158665	2.36
## X2013	4678.49	2.306099398	14.97832377	2.37
## X2014	4748.51	1.969737667	16.84170264	2.31
## X2015	4724.58	1.689515514	16.6323664788636	2.32
## X2016	4999.22	0.483362136977778	16.6323664788636	2.34
## X2017	4748.67	0.483362136977778	16.6323664788636	2.27
## X2018	4681.8	0.483362136977778	16.6323664788636	2.16

## X2019	4918.95	0.483362136977778	16.6323664788636	2.07
## X2020	4713.82	0.483362136977778	16.6323664788636	2.01
## X2021	4557.79196078431	0.483362136977778	16.6323664788636	2.43285714285714
## X2022	4557.79196078431	0.483362136977778	16.6323664788636	2.43285714285714
## X2023	4557.79196078431	0.483362136977778	16.6323664788636	2.43285714285714
##	X90	X91	X92	X93
## X1960	133.662833065909	6.784	55.4183606557377	14.6150853940625
## X1961	133.662833065909	6.831	25.4	14.6150853940625
## X1962	133.662833065909	6.865	24.31	14.6150853940625
## X1963	133.662833065909	6.841	27.54	14.6150853940625
## X1964	133.662833065909	6.837	27.73	14.6150853940625
## X1965	133.662833065909	6.83	27.92	14.6150853940625
## X1966	133.662833065909	6.824	26.82	14.6150853940625
## X1967	133.662833065909	6.854	30.32	14.6150853940625
## X1968	133.662833065909	6.85	31.06	14.6150853940625
## X1969	133.662833065909	6.863	32.34	14.6150853940625
## X1970	133.662833065909	6.882	30.86	14.6150853940625
## X1971	83.15565456	6.865	28.75	14.6150853940625
## X1972	84.68787378	6.845	28.3	14.6150853940625
## X1973	89.29594844	6.819	31.2	14.6150853940625
## X1974	89.95124418	6.794	30.32	14.6150853940625
## X1975	90.05370725	6.737	33.39	14.6150853940625
## X1976	93.67891471	6.674	32.02	14.6150853940625
## X1977	93.74117424	6.593	34.1	14.6150853940625
## X1978	94.69385077	6.516	35.3	14.6150853940625
## X1979	96.1548137	6.424	35.08	14.6150853940625
## X1980	100.1119329	6.323	35.63	14.6150853940625
## X1981	99.52166817	6.239	35.39	14.6150853940625
## X1982	102.2822047	6.116	36.68	14.6150853940625
## X1983	101.8740876	5.891	37.58	14.6150853940625
## X1984	100.6059824	5.727	37.91	14.6150853940625
## X1985	103.6998274	5.541	39.29	14.6150853940625
## X1986	108.4204915	5.3	39.67	14.6150853940625
## X1987	104.3772941	5.073	39.74	14.6150853940625
## X1988	112.2514071	4.844	40.38	14.6150853940625
## X1989	115.3584534	4.676	44.19	14.6150853940625
## X1990	118.8809449	4.479	44.64	14.75247753
## X1991	114.932509	4.24	45.96	14.75247599
## X1992	119.1000328	4.026	46.57	14.75247446
## X1993	123.3688445	3.852	46.53	14.75247292
## X1994	126.4047898	3.774	44.9	14.75247138
## X1995	134.9834063	3.605	46.89	14.75246985
## X1996	133.4230304	3.504	49.45	14.75246908
## X1997	136.9105455	3.491	50.08	14.75246754
## X1998	140.0729314	3.393	51.98	14.75246601
## X1999	139.2390399	3.304	58.82	14.75246447
## X2000	141.3536088	3.218	62.64	14.75246293
## X2001	151.7153229	3.146	61.36	14.72789045
## X2002	152.4800174	3.084	63.17	14.70331797
## X2003	157.8900865	3.002	64.86	14.67874549

## X2004	158.1630412	2.914	63.83	14.654173
## X2005	161.7588677	2.808	71.77	14.62960052
## X2006	171.2278354	2.712	74.12	14.60502804
## X2007	177.0200969	2.626	78.4	14.58045556
## X2008	184.1564385	2.535	84.55	14.55588308
## X2009	192.0439481	2.44	85.07	14.53130983
## X2010	205.6245892	2.34	90.16	14.50673734
## X2011	210.7342601	2.262	93.31	14.4991442
## X2012	218.4035193	2.209	94.1	14.49155105
## X2013	220.2323144	2.184	96.33	14.4839579
## X2014	227.1281031	2.152	98.72	14.47636475
## X2015	133.662833065909	2.114	100.48	14.46877161
## X2016	133.662833065909	2.097	100.8	14.46877161
## X2017	133.662833065909	2.043	107.85	14.46877161
## X2018	133.662833065909	2.04	107.75	14.46877161
## X2019	133.662833065909	2.031	108.34	14.46877161
## X2020	133.662833065909	2.003	111.48	14.46877161
## X2021	133.662833065909 4.60468852459016		116.39	14.46877161
## X2022	133.662833065909 4.60468852459016	55.4183606557377	14.6150853940625	
## X2023	133.662833065909 4.60468852459016	55.4183606557377	14.6150853940625	
##	X94	X95	X98	
X99				
## X1960	48.2559945370455 4.38470619175806	-0.755061165666667		
	12.7288929124857			
## X1961	48.2559945370455 6.058160825	-0.755061165666667		
	12.7288929124857			
## X1962	48.2559945370455 5.45303097	-0.755061165666667		
	12.7288929124857			
## X1963	48.2559945370455 -0.45589429	-0.755061165666667		
	12.7288929124857			
## X1964	48.2559945370455 10.95278855	-0.755061165666667		
	12.7288929124857			
## X1965	48.2559945370455 1.606258229	-0.755061165666667		
	12.7288929124857			
## X1966	48.2559945370455 2.566812001	-0.755061165666667		
	12.7288929124857			
## X1967	48.2559945370455 -1.87586392	-0.755061165666667		
	12.7288929124857			
## X1968	48.2559945370455 9.489454015	-0.755061165666667		
	12.7288929124857			
## X1969	48.2559945370455 1.220857909	-0.755061165666667		
	12.7288929124857			
## X1970	48.2559945370455 5.619852293	-0.755061165666667		
	12.7288929124857			
## X1971	21.37970843 -5.479483027	-0.755061165666667		
	12.7288929124857			
## X1972	20.70642323 -13.9737287	-0.755061165666667		
	12.7288929124857			
## X1973	24.21142072 3.325680199	-0.755061165666667		
	12.7288929124857			

## X1974	25.44941545	9.5919563	-0.755061165666667
12.7288929124857			
## X1975	24.68487268	-4.088214092	-0.755061165666667
12.7288929124857			
## X1976	27.4255112	5.661361201	-0.755061165666667
12.7288929124857			
## X1977	27.29295886	2.67305605	-0.755061165666667
12.7288929124857			
## X1978	28.23405541	7.073837733	-0.755061165666667
12.7288929124857			
## X1979	29.42090283	4.801634601	-0.755061165666667
12.7288929124857			
## X1980	32.14606925	0.819141869	-0.755061165666667
5.263599873			
## X1981	32.71261599	7.233943695	-0.755061165666667
6.634029865			
## X1982	34.96024073	2.134327836	-0.755061165666667
6.394110203			
## X1983	33.38567736	3.8810464	-0.755061165666667
6.473259926			
## X1984	34.91556523	4.803310015	-0.755061165666667
8.087619781			
## X1985	37.32672746	3.342014654	-0.755061165666667
8.388629913			
## X1986	39.08684745	4.173382559	-0.755061165666667
9.130049706			
## X1987	43.8731951	3.772401853	-0.755061165666667
10.46842957			
## X1988	44.18503533	2.416256856	-0.755061165666667
12.7288929124857			
## X1989	45.0727052	2.836582129	-0.755061165666667
12.7288929124857			
## X1990	45.52428698	5.622258162	-0.755061165666667
11.19102955			
## X1991	44.67103918	3.485227816	-0.755061165666667
11.06210041			
## X1992	46.72802762	5.44268555	-0.755061165666667
12.53666973			
## X1993	49.45684214	4.711561725	-0.755061165666667
12.11384964			
## X1994	50.25109694	3.890126441	-0.755061165666667
12.7288929124857			
## X1995	54.40918593	5.121277897	-0.755061165666667
12.7288929124857			
## X1996	56.07741741	4.522919217	-0.687850118
12.7288929124857			
## X1997	56.57335085	4.489896498	-0.755061165666667
15.19686985			
## X1998	57.62886784	5.177026873	-0.490328997
12.7288929124857			

## X1999	57.27512604	4.670156369	-0.755061165666667
18.12978935			
## X2000	57.94291987	5.293294719	-0.607652247
20.49041939			
## X2001	60.7230371	5.077287775	-0.755061165666667
18.58477974			
## X2002	61.04664093	3.83312394	-0.726736128
15.69379997			
## X2003	62.3942704	4.7395674	-0.838938594
16.68162918			
## X2004	62.48464734	5.23953291	-0.932882547
15.95312023			
## X2005	63.34035291	6.535944939	-0.918954313
12.7288929124857			
## X2006	65.33087795	6.671904986	-0.838699102
17.33653069			
## X2007	66.41712545	7.058599354	-0.707532763
18.15340042			
## X2008	67.58003802	6.013789757	-0.738396406
17.81619072			
## X2009	69.00602698	5.045124799	-0.802756429
14.02987003			
## X2010	70.96940448	5.571788185	-0.753689587
12.7288929124857			
## X2011	71.64883909	6.464379125	-0.772120714
16.79397011			
## X2012	72.68378039	6.521458779	-0.807726145
12.27794361			
## X2013	72.86167193	6.013605658	-0.79695034
11.81209469			
## X2014	73.76893795	6.061059359	-0.774807811
13.30632782			
## X2015	48.2559945370455	6.552639878	-0.752515137
12.04410267			
## X2016	48.2559945370455	7.113478213	-0.706855893
13.98173618			
## X2017	48.2559945370455	6.590254815	-0.75189054
13.85498238			
## X2018	48.2559945370455	7.31940778	-0.762530446
11.95792007			
## X2019	48.2559945370455	7.881906729	-0.753748298
11.32936764			
## X2020	48.2559945370455	3.448025628	-0.77972573
10.38743782			
## X2021	48.2559945370455	6.938679124	-0.655627787
10.22130299			
## X2022	48.2559945370455	7.099828776	-0.762551904
11.73428822			
## X2023	48.2559945370455	4.38470619175806	-0.755061165666667
12.7288929124857			

##	X100	X101	X104	X105
## X1960	55.9294117647059	87.9580392156863	6.93236677216129	59.25846875
## X1961	55.9294117647059	87.9580392156863	6.93236677216129	59.25846875
## X1962	55.9294117647059	87.9580392156863	6.93236677216129	59.25846875
## X1963	55.9294117647059	87.9580392156863	6.93236677216129	59.25846875
## X1964	55.9294117647059	87.9580392156863	6.93236677216129	59.25846875
## X1965	55.9294117647059	87.9580392156863	6.93236677216129	59.25846875
## X1966	55.9294117647059	87.9580392156863	6.93236677216129	59.25846875
## X1967	55.9294117647059	87.9580392156863	6.93236677216129	59.25846875
## X1968	55.9294117647059	87.9580392156863	6.93236677216129	59.25846875
## X1969	55.9294117647059	87.9580392156863	6.93236677216129	59.25846875
## X1970	40.26	91.57	6.93236677216129	59.25846875
## X1971	11.45	66.94	6.93236677216129	59.25846875
## X1972	50.67	76.72	6.93236677216129	59.25846875
## X1973	33.64	68.07	6.93236677216129	59.25846875
## X1974	35.34	133.52	6.93236677216129	59.25846875
## X1975	29.02	100.43	6.93236677216129	59.25846875
## X1976	19.98	77.63	6.93236677216129	59.25846875
## X1977	28.32	99.46	6.93236677216129	59.25846875
## X1978	30.66	138.79	6.93236677216129	59.25846875
## X1979	64.14	53.54	6.93236677216129	59.25846875
## X1980	41.01	78.46	6.93236677216129	59.25846875
## X1981	25.43	91.19	6.93236677216129	59.25846875
## X1982	43	60.73	6.93236677216129	59.25846875
## X1983	48.26	131.84	6.93236677216129	59.25846875
## X1984	28.37	107.16	6.93236677216129	59.25846875
## X1985	29.77	44.73	6.93236677216129	59.25846875
## X1986	38.42	53.61	6.93236677216129	59.25846875
## X1987	53.87	39.11	6.93236677216129	59.25846875
## X1988	42.74	25.31	6.93236677216129	59.25846875
## X1989	49.61	146.46	6.93236677216129	59.25846875
## X1990	38.06	63.07	0	59.174
## X1991	42.81	111.82	0	59.192
## X1992	45.16	109.65	0	59.237
## X1993	38.67	97.9	0	59.299
## X1994	45.4	61.3	0	59.372
## X1995	61.52	87.92	0	59.452
## X1996	54.69	61.46	6.93236677216129	59.41
## X1997	44.97	127.02	0.000751046	59.379
## X1998	77.26	107.75	0.003684813	59.363
## X1999	46.11	38.95	0.036170407	59.36
## X2000	45.64	69.96	0.071039423	59.362
## X2001	50.76	99.4	0.129807974	59.337
## X2002	45.14	49.3	0.139920289	59.336
## X2003	61.77	136.31	0.163877665	59.353
## X2004	56.73	96.64	0.199036334	59.375
## X2005	71.21	44.42	0.241637326	59.397
## X2006	66.7	46.38	1	59.353
## X2007	68.85	93.4	1.8	59.192
## X2008	58.42	66.89	2.5	59.032

## X2009	83.51	39.69	3.1	58.87
## X2010	102.36	88.35	3.7	58.707
## X2011	64.62	155.32	4.5	58.545
## X2012	91.67	143.64	5	58.382
## X2013	76.77	145.32	6.63	58.213
## X2014	91.52	115.37	11.9	58.043
## X2015	80.33	99.13	12.9	57.882
## X2016	101.38	67.5	18.1	57.731
## X2017	98.65	43.23	19.8	60.402
## X2018	87.56	133.19	23.44	60.645
## X2019	107.43	84.76	27.76	60.868
## X2020	102.77	115.55	32.87	60.351
## X2021	55.9294117647059	87.9580392156863	38.91744466	60.657
## X2022	55.9294117647059	87.9580392156863	6.93236677216129	59.25846875
## X2023	55.9294117647059	87.9580392156863	6.93236677216129	59.25846875
##	X106	X108	X111	X112
## X1960	27.2925229954545	44.74	0.554768984032258	262
## X1961	27.2925229954545	45.662	0.554768984032258	256
## X1962	27.2925229954545	46.701	0.554768984032258	250.2
## X1963	27.2925229954545	46.655	0.554768984032258	245.1
## X1964	27.2925229954545	47.741	0.554768984032258	240.5
## X1965	27.2925229954545	46.858	0.554768984032258	236.6
## X1966	27.2925229954545	48.577	0.554768984032258	233.5
## X1967	27.2925229954545	48.865	0.554768984032258	231.2
## X1968	27.2925229954545	49.09	0.554768984032258	229.6
## X1969	27.2925229954545	49.172	0.554768984032258	228.6
## X1970	27.2925229954545	42.587	0.554768984032258	273.1
## X1971	27.2925229954545	25.996	0.554768984032258	373.2
## X1972	27.2925229954545	49.591	0.554768984032258	227.5
## X1973	27.2925229954545	49.828	0.554768984032258	226.9
## X1974	27.2925229954545	49.16	0.554768984032258	225.6
## X1975	27.2925229954545	50.292	0.554768984032258	223.8
## X1976	27.2925229954545	50.647	0.554768984032258	221.3
## X1977	27.2925229954545	51.197	0.554768984032258	218.1
## X1978	27.2925229954545	51.254	0.554768984032258	214.3
## X1979	27.2925229954545	51.464	0.554768984032258	210
## X1980	27.2925229954545	51.85	0.554768984032258	205.3
## X1981	27.2925229954545	52.169	0.554768984032258	200.3
## X1982	27.2925229954545	52.54	0.554768984032258	195
## X1983	27.2925229954545	53.011	0.554768984032258	189.4
## X1984	27.2925229954545	53.54	0.554768984032258	183.6
## X1985	27.2925229954545	53.897	0.554768984032258	177.5
## X1986	27.2925229954545	54.415	0.554768984032258	171.3
## X1987	27.2925229954545	54.926	0.554768984032258	164.9
## X1988	27.2925229954545	55.027	0.554768984032258	158.5
## X1989	27.2925229954545	55.089	0.554768984032258	152.2
## X1990	27.2925229954545	55.989	0.612246446	146
## X1991	27.2925229954545	54.154	0.60132446	139.7
## X1992	27.2925229954545	57.635	0.597061317	133.4
## X1993	27.2925229954545	57.927	0.587743193	127.1

## X1994	27.2925229954545	58.617	0.584561547	120.9
## X1995	27.2925229954545	59.467	0.580444793	114.7
## X1996	27.2925229954545	59.492	0.567310038	108.6
## X1997	27.2925229954545	61.427	0.561871978	102.7
## X1998	27.2925229954545	63.917	0.548655016	96.9
## X1999	27.2925229954545	66.228	0.554182108	91.3
## X2000	27.7808429	65.779	0.549229925	86.1
## X2001	27.6563107	66.135	0.540523835	81.1
## X2002	27.0937614	66.612	0.541026123	76.6
## X2003	26.718918	66.824	0.539070178	72.3
## X2004	27.0938319	67.187	0.529223543	68.3
## X2005	27.1555777	67.299	0.534145494	64.5
## X2006	27.8440888	67.241	0.536404794	61
## X2007	27.2813552	66.714	0.536644663	57.7
## X2008	27.093594	67.051	0.550673636	54.7
## X2009	27.656309	67.403	0.553887714	51.8
## X2010	27.0943933	68.638	0.557482315	49.2
## X2011	27.2810191	68.809	0.555183672	46.7
## X2012	26.9063556	69.554	0.552067908	44.4
## X2013	27.4058964	69.565	0.549986815	42.1
## X2014	27.7185914	69.986	0.547343428	40
## X2015	27.2808796	70.491	0.545807205	38
## X2016	27.4686204	71.09	0.537740105	36
## X2017	27.1562907	71.788	0.54406929	34.1
## X2018	26.718478	72.567	0.536882813	32.2
## X2019	27.2810004	72.806	0.534023414	30.4
## X2020	27.1556235	71.968	0.531020739	28.8
## X2021	27.5937679	57.7524754098361	0.554768984032258	27.3
## X2022	27.2925229954545	57.7524754098361	0.554768984032258	144.027419354839
## X2023	27.2925229954545	57.7524754098361	0.554768984032258	144.027419354839
##	X113	X114	X115	X116
## X1960	13584	0.156040736516129	47.1904761904762	56.196965153913
## X1961	26505	0.156040736516129	47.1904761904762	56.196965153913
## X1962	26541	0.156040736516129	47.1904761904762	56.196965153913
## X1963	23215	0.156040736516129	47.1904761904762	56.196965153913
## X1964	25430	0.156040736516129	47.1904761904762	56.196965153913
## X1965	47618	0.156040736516129	47.1904761904762	56.196965153913
## X1966	3756	0.156040736516129	47.1904761904762	56.196965153913
## X1967	23163	0.156040736516129	47.1904761904762	56.196965153913
## X1968	-15936	0.156040736516129	47.1904761904762	56.196965153913
## X1969	-132422	0.156040736516129	47.1904761904762	56.196965153913
## X1970	-193149	0.156040736516129	47.1904761904762	56.196965153913
## X1971	-289989	0.156040736516129	47.1904761904762	56.196965153913
## X1972	-331901	0.156040736516129	47.1904761904762	56.196965153913
## X1973	-320793	0.156040736516129	47.1904761904762	56.196965153913
## X1974	-349410	0.156040736516129	47.1904761904762	56.196965153913
## X1975	-499347	0.156040736516129	47.1904761904762	56.196965153913
## X1976	-635891	0.156040736516129	47.1904761904762	56.196965153913
## X1977	-472837	0.156040736516129	47.1904761904762	56.196965153913
## X1978	-503563	0.156040736516129	47.1904761904762	56.196965153913

## X1979	-495624	0.156040736516129	47.1904761904762	56.196965153913
## X1980	-369408	0.156040736516129		34 56.196965153913
## X1981	-194707	0.156040736516129		39 56.196965153913
## X1982	-129194	0.156040736516129		40 56.196965153913
## X1983	-52640	0.156040736516129		40 56.196965153913
## X1984	-137861	0.156040736516129		62 56.196965153913
## X1985	-204954	0.156040736516129		40 56.196965153913
## X1986	-344929	0.156040736516129		16 56.196965153913
## X1987	-369057	0.156040736516129		23 56.196965153913
## X1988	-319331	0.156040736516129		24 56.196965153913
## X1989	-285369	0.156040736516129		32 56.196965153913
## X1990	-200144	0.137031739		32 56.196965153913
## X1991	-386852	0.141662406		36 56.196965153913
## X1992	-265940	0.14191441		72 56.196965153913
## X1993	-271146	0.142620757		36 56.196965153913
## X1994	-214321	0.145576284		39 56.196965153913
## X1995	-374788	0.153734199		70 56.196965153913
## X1996	-389040	0.155458029		22 56.196965153913
## X1997	-390261	0.148878536		46 56.196965153913
## X1998	-407859	0.146485116		32 56.196965153913
## X1999	-435710	0.15360652		49 56.196965153913
## X2000	-424718	0.152074872		70 55.31870083
## X2001	-347605	0.152848567		59 55.32511609
## X2002	-451611	0.154438672		43 55.30371515
## X2003	-533925	0.148418167		58 55.27874715
## X2004	-535175	0.147053252		48 55.25035294
## X2005	-715970	0.150361899		50 55.21885007
## X2006	-1146688	0.155792176		22 55.18367364
## X2007	-923456	0.154765099		29 55.14496823
## X2008	-1390782	0.167749718		60 55.10287513
## X2009	-740788	0.162901815		55 55.05754576
## X2010	-462265	0.164761799		66 55.00858639
## X2011	-341152	0.169820116		37 54.95632277
## X2012	-242022	0.163797678		67 55.30369245
## X2013	-194048	0.162828093		60 55.66687813
## X2014	-219628	0.16670935		44 56.04547782
## X2015	-286512	0.16901234		41 56.44019783
## X2016	-55013	0.161098936		77 56.85079903
## X2017	-175755	0.164581421		61 57.27760142
## X2018	-323380	0.167597461		69 57.72074495
## X2019	-344054	0.165981297		68 58.18021327
## X2020	-61154	0.167702108		40 58.65599777
## X2021	-323119.049180328	0.156040736516129		74 59.1298464
## X2022	-323119.049180328	0.156040736516129	47.1904761904762	59.10929532
## X2023	-323119.049180328	0.156040736516129	47.1904761904762	56.196965153913
##	X117	X119	X120	X121
## X1960	19.87949675	-1.18911445016667	3.008837194	840.973809037705
## X1961	19.87949675	-1.18911445016667	2.996930445	398.577007
## X1962	19.87949675	-1.18911445016667	2.993483498	410.7064685
## X1963	19.87949675	-1.18911445016667	2.99913518	423.2474072

## X1964	19.87949675	-1.18911445016667	3.012897585	436.1562956
## X1965	19.87949675	-1.18911445016667	3.031277231	449.4135285
## X1966	19.87949675	-1.18911445016667	3.055383866	462.9734885
## X1967	19.87949675	-1.18911445016667	3.084601576	477.1029269
## X1968	19.87949675	-1.18911445016667	3.114990531	491.6313436
## X1969	19.87949675	-1.18911445016667	3.14516965	506.0068218
## X1970	19.87949675	-1.18911445016667	3.169233841	518.8742414
## X1971	19.87949675	-1.18911445016667	3.116379494	525.2838903
## X1972	19.87949675	-1.18911445016667	3.072138733	532.7395329
## X1973	19.87949675	-1.18911445016667	3.108511712	546.5531075
## X1974	19.87949675	-1.18911445016667	3.144309054	560.4041407
## X1975	19.87949675	-1.18911445016667	3.189076323	573.8675962
## X1976	19.87949675	-1.18911445016667	3.246369363	586.77176
## X1977	19.87949675	-1.18911445016667	3.303838108	600.2749328
## X1978	19.87949675	-1.18911445016667	3.355248348	614.6389337
## X1979	19.87949675	-1.18911445016667	3.398764937	629.2398479
## X1980	19.87949675	-1.18911445016667	3.433538766	644.7704156
## X1981	19.87949675	-1.18911445016667	3.457801835	661.8639932
## X1982	19.87949675	-1.18911445016667	3.47222837	680.3052623
## X1983	19.87949675	-1.18911445016667	3.480332104	699.4351848
## X1984	19.87949675	-1.18911445016667	3.487157254	718.554498
## X1985	19.87949675	-1.18911445016667	3.496129116	737.182907
## X1986	19.87949675	-1.18911445016667	3.505500452	754.9492663
## X1987	19.87949675	-1.18911445016667	3.513193359	771.9924407
## X1988	19.87949675	-1.18911445016667	3.514489236	788.8824844
## X1989	19.87949675	-1.18911445016667	3.504710415	805.8206499
## X1990	19.87949675	-1.18911445016667	3.492739192	823.136291
## X1991	19.87949675	-1.18911445016667	3.488107955	839.232035
## X1992	19.87949675	-1.18911445016667	3.491599792	854.8214028
## X1993	19.87949675	-1.18911445016667	3.496549517	871.3125682
## X1994	19.87949675	-1.18911445016667	3.499670283	888.1838442
## X1995	19.87949675	-1.18911445016667	3.510111907	904.9192441
## X1996	19.87949675	-0.54881525	3.523240614	920.9254667
## X1997	19.87949675	-1.18911445016667	3.544863532	937.5372667
## X1998	19.87949675	-0.370746762	3.595519956	955.2928555
## X1999	19.87949675	-1.18911445016667	3.676452582	973.7637244
## X2000	11.0465157	-0.726261258	3.760924123	992.4969425
## X2001	11.7415265	-1.18911445016667	3.833554299	1011.527111
## X2002	12.45785625	-1.032590389	3.905539955	1030.497242
## X2003	13.17340431	-1.115581155	3.978593016	1048.653346
## X2004	13.88794175	-1.360476375	4.049042175	1066.218983
## X2005	14.60459034	-1.863839388	4.116786882	1082.527387
## X2006	15.32344548	-1.507097363	4.187113474	1095.712
## X2007	16.0442555	-1.543071628	4.250552468	1107.289959
## X2008	16.76500767	-1.508331299	4.312835	1117.164616
## X2009	17.48508201	-1.546771407	4.378055116	1127.040101
## X2010	18.2042186	-1.425789475	4.446822447	1139.979558
## X2011	18.92166074	-1.404736876	4.522813743	1153.960244
## X2012	19.63638733	-1.379088998	4.599282417	1168.400161
## X2013	20.34758401	-1.627858877	4.664372196	1183.299831

##	X2014	21.50997925	-0.895563185	4.721536734	1198.135507
##	X2015	22.70013176	-1.209773779	4.807338607	1212.491357
##	X2016	23.91708286	-1.259732962	4.926093348	1227.50686
##	X2017	25.15955384	-1.253626704	5.070918792	1242.943566
##	X2018	26.42637731	-0.985568643	5.246503448	1257.462995
##	X2019	27.71641782	-0.928613365	5.443869725	1271.538926
##	X2020	29.02851262	-0.915807784	5.632962584	1286.171553
##	X2021	30.15469977	-1.036632776	3.73091841729508	1301.039034
##	X2022	30.97619383	-1.092371106	3.73091841729508	840.973809037705
##	X2023	19.87949675	-1.18911445016667	3.73091841729508	840.973809037705
##		X123	X124	X126	X127
##	X1960	10.78333333333333	13.9857142857143	14.935705292375	36.3484040138235
##	X1961	10.78333333333333	13.9857142857143	14.935705292375	36.3484040138235
##	X1962	10.78333333333333	13.9857142857143	14.935705292375	36.3484040138235
##	X1963	10.78333333333333	13.9857142857143	14.935705292375	36.3484040138235
##	X1964	10.78333333333333	13.9857142857143	14.935705292375	36.3484040138235
##	X1965	10.78333333333333	13.9857142857143	14.935705292375	36.3484040138235
##	X1966	10.78333333333333	13.9857142857143	14.935705292375	36.3484040138235
##	X1967	10.78333333333333	13.9857142857143	14.935705292375	36.3484040138235
##	X1968	10.78333333333333	13.9857142857143	14.935705292375	36.3484040138235
##	X1969	10.78333333333333	13.9857142857143	14.935705292375	36.3484040138235
##	X1970	10.78333333333333	13.9857142857143	14.935705292375	36.3484040138235
##	X1971	10.78333333333333	13.9857142857143	14.935705292375	36.3484040138235
##	X1972	10.78333333333333	13.9857142857143	14.935705292375	36.3484040138235
##	X1973	10.78333333333333	13.9857142857143	14.935705292375	36.3484040138235
##	X1974	10.78333333333333	13.9857142857143	14.935705292375	36.3484040138235
##	X1975	4.6	13.9857142857143	14.935705292375	36.3484040138235
##	X1976	4.7	13.9857142857143	14.935705292375	36.3484040138235
##	X1977	4.9	13.9857142857143	14.935705292375	36.3484040138235
##	X1978	5.1	13.9857142857143	14.935705292375	36.3484040138235
##	X1979	5.4	13.9857142857143	14.935705292375	36.3484040138235
##	X1980	5.6	13.9857142857143	14.935705292375	36.3484040138235
##	X1981	5.8	13.9857142857143	14.935705292375	36.3484040138235
##	X1982	6.1	13.9857142857143	14.935705292375	36.3484040138235
##	X1983	6.3	13.9857142857143	14.935705292375	36.3484040138235
##	X1984	6.6	13.9857142857143	14.935705292375	36.3484040138235
##	X1985	6.9	13.9857142857143	14.935705292375	36.3484040138235
##	X1986	7.1	13.9857142857143	14.935705292375	36.3484040138235
##	X1987	7.4	13.9857142857143	14.935705292375	36.3484040138235
##	X1988	7.7	13.9857142857143	14.935705292375	36.3484040138235
##	X1989	8	13.9857142857143	14.935705292375	36.3484040138235
##	X1990	8.3	13.9857142857143	14.935705292375	29.31752679
##	X1991	8.6	13.9857142857143	14.935705292375	29.45750411
##	X1992	8.9	13.9857142857143	14.935705292375	29.65126771
##	X1993	9.2	13.9857142857143	14.935705292375	29.89434712
##	X1994	9.5	13.9857142857143	14.935705292375	30.17761508
##	X1995	9.8	13.9857142857143	14.935705292375	30.49428798
##	X1996	10.2	13.9857142857143	14.935705292375	30.81006886
##	X1997	10.5	13.9857142857143	9.090909091	31.16253669
##	X1998	10.9	13.9857142857143	9.090909091	31.53703091

## X1999	11.2	13.9857142857143	9.090909091	31.91445539
## X2000	11.6	13.9857142857143	9.090909091	32.2789022
## X2001	12	15.6	14.935705292375	32.54193637
## X2002	12.4	14.8	2	32.80100402
## X2003	12.9	14.4	2	33.04904051
## X2004	13.3	13.9	2	33.28488875
## X2005	13.8	13.7	14.7826087	33.51492348
## X2006	14.3	13.2	15.07246377	33.63546093
## X2007	14.8	13.2	14.935705292375	34.33842077
## X2008	15.3	12.9	6.333333333	35.06336965
## X2009	15.8	14.4	18.55072464	35.81202928
## X2010	16.4	15.2	18.55072464	36.58475724
## X2011	17	16.1	19.71428571	37.3822479
## X2012	17.6	15.8	19.71428571	38.20620103
## X2013	18.2	15.6	19.71428571	39.05912502
## X2014	18.8	14.8	19.82758621	39.94087214
## X2015	19.4	14.8	20	40.85498576
## X2016	20	14.3	20	41.80088951
## X2017	10.78333333333333	13.6	20.28571429	45.05995797
## X2018	10.78333333333333	12.7	20.28571429	45.32473628
## X2019	10.78333333333333	11.8	20.63037249	45.5166967
## X2020	10.78333333333333	11.7	20.91690544	45.51716407
## X2021	10.78333333333333	11.2	20.85714286	46.28973502
## X2022	10.78333333333333	13.9857142857143	20.85714286	46.76450885
## X2023	10.78333333333333	13.9857142857143	14.935705292375	46.80724238
##	X128	X129	X130	
X132				
## X1960	-0.939827812291667	4.50179152826923	49.3793548387097	- 0.821406779208333
## X1961	-0.939827812291667	4.50179152826923	49.3793548387097	- 0.821406779208333
## X1962	-0.939827812291667	4.50179152826923	49.3793548387097	- 0.821406779208333
## X1963	-0.939827812291667	4.50179152826923	49.3793548387097	- 0.821406779208333
## X1964	-0.939827812291667	4.50179152826923	49.3793548387097	- 0.821406779208333
## X1965	-0.939827812291667	4.50179152826923	49.3793548387097	- 0.821406779208333
## X1966	-0.939827812291667	4.50179152826923	49.3793548387097	- 0.821406779208333
## X1967	-0.939827812291667	4.50179152826923	49.3793548387097	- 0.821406779208333
## X1968	-0.939827812291667	4.50179152826923	49.3793548387097	- 0.821406779208333
## X1969	-0.939827812291667	4.50179152826923	49.3793548387097	- 0.821406779208333
## X1970	-0.939827812291667	4.50179152826923	49.3793548387097	- 0.821406779208333
## X1971	-0.939827812291667	4.50179152826923	49.3793548387097	- 0.821406779208333

0.821406779208333				
## X1972	-0.939827812291667	4.50179152826923	49.3793548387097	-
0.821406779208333				
## X1973	-0.939827812291667	4.50179152826923	49.3793548387097	-
0.821406779208333				
## X1974	-0.939827812291667	4.50179152826923	49.3793548387097	-
0.821406779208333				
## X1975	-0.939827812291667	4.50179152826923	49.3793548387097	-
0.821406779208333				
## X1976	-0.939827812291667	4.50179152826923	49.3793548387097	-
0.821406779208333				
## X1977	-0.939827812291667	4.50179152826923	49.3793548387097	-
0.821406779208333				
## X1978	-0.939827812291667	4.50179152826923	49.3793548387097	-
0.821406779208333				
## X1979	-0.939827812291667	4.50179152826923	49.3793548387097	-
0.821406779208333				
## X1980	-0.939827812291667	4.50179152826923	49.3793548387097	-
0.821406779208333				
## X1981	-0.939827812291667	4.50179152826923	49.3793548387097	-
0.821406779208333				
## X1982	-0.939827812291667	4.50179152826923	49.3793548387097	-
0.821406779208333				
## X1983	-0.939827812291667	4.50179152826923	49.3793548387097	-
0.821406779208333				
## X1984	-0.939827812291667	4.50179152826923	49.3793548387097	-
0.821406779208333				
## X1985	-0.939827812291667	4.50179152826923	49.3793548387097	-
0.821406779208333				
## X1986	-0.939827812291667	4.50179152826923	49.3793548387097	-
0.821406779208333				
## X1987	-0.939827812291667	4.50179152826923	49.3793548387097	-
0.821406779208333				
## X1988	-0.939827812291667	4.50179152826923	49.3793548387097	-
0.821406779208333				
## X1989	-0.939827812291667	4.50179152826923	49.3793548387097	-
0.821406779208333				
## X1990	-0.939827812291667	11.43300569	71.67	-
0.821406779208333				
## X1991	-0.939827812291667	10.13301088	73.16	-
0.821406779208333				
## X1992	-0.939827812291667	8.949853834	71.66	-
0.821406779208333				
## X1993	-0.939827812291667	6.604388442	70.56	-
0.821406779208333				
## X1994	-0.939827812291667	8.656991006	68.98	-
0.821406779208333				
## X1995	-0.939827812291667	3.442531927	63.81	-
0.821406779208333				
## X1996	-0.929817796	6.440648423	62.13	-

0.934023738				
## X1997	-0.939827812291667	6.063417102	59.98	-
0.821406779208333				
## X1998	-1.049343109	6.714795839	60.24	-
0.935864508				
## X1999	-0.939827812291667	5.764705882	60.54	-
0.821406779208333				
## X2000	-0.941208124	4.749223258	60.2	-
0.991129994				
## X2001	-0.939827812291667	5.709521619	55.96	-
0.821406779208333				
## X2002	-1.055441499	4.012858291	54.47	-
0.991601229				
## X2003	-1.044749141	3.799715909	52.62	-
1.151943922				
## X2004	-1.175912261	3.034477171	52.05	-
1.122482061				
## X2005	-1.081751704	2.832079253	50.66	-
0.978551865				
## X2006	-1.005542517	2.536317768	48.69	-
0.907564044				
## X2007	-0.953167856	2.415739397	47.19	-
0.827155948				
## X2008	-0.91451782	2.776316559	45.2	-
0.752373576				
## X2009	-0.866342843	1.121661242	43.1	-
0.784571469				
## X2010	-0.85759306	1.787202746	40.31	-
0.801013291				
## X2011	-0.81707859	1.974950739	38.44	-
0.733335555				
## X2012	-0.959472537	1.600016474	37.36	-
0.936167359				
## X2013	-0.923936903	1.946536145	36.96	-
0.871759772				
## X2014	-0.955160499	1.319724237	35.34	-
0.782509089				
## X2015	-0.920240402	1.226889902	31.12	-
0.770436168				
## X2016	-0.811327994	4.50179152826923	30.23	-
0.670857012				
## X2017	-0.826628149	4.50179152826923	28.01	-
0.681922019				
## X2018	-0.849186778	4.50179152826923	25.79	-
0.649730861				
## X2019	-0.937222183	4.50179152826923	26.37	-
0.644387662				
## X2020	-0.906213522	4.50179152826923	27.96	-
0.56792897				
## X2021	-0.846353292	4.50179152826923	49.3793548387097	-

```

0.625113249
## X2022      -0.927658916 4.50179152826923 49.3793548387097      -
0.60133934
## X2023 -0.939827812291667 4.50179152826923 49.3793548387097 -
0.821406779208333
##          X133          X134          X135          X136
X139
## X1960 81.3958721171875 0.823472121125 1513.7968      -0.593199708
10482.25
## X1961 81.3958721171875 0.823472121125 1513.7968      0.694658443
10482.25
## X1962 81.3958721171875 0.823472121125 1513.7968      -1.01597502
10482.25
## X1963 81.3958721171875 0.823472121125 1513.7968      -0.557486963
10482.25
## X1964 81.3958721171875 0.823472121125 1513.7968      0.433046217
10482.25
## X1965 81.3958721171875 0.823472121125 1513.7968      -0.06886158
10482.25
## X1966 81.3958721171875 0.823472121125 1513.7968      -0.983570746
10482.25
## X1967 81.3958721171875 0.823472121125 1513.7968      -0.834796989
10482.25
## X1968 81.3958721171875 0.823472121125 1513.7968      0.581304775
10482.25
## X1969 81.3958721171875 0.823472121125 1513.7968      -0.592142047
10482.25
## X1970      53.94593811 0.823472121125 1513.7968      1.157045334
10482.25
## X1971      50.28892899 0.823472121125 1513.7968      -0.84305255
10482.25
## X1972      63.09469986 0.823472121125 1513.7968      -2.105640783
10482.25
## X1973      74.88262939      0.500899971 1513.7968      0.562084712
10482.25
## X1974      72.79637909 0.823472121125 1513.7968      1.197004117
10482.25
## X1975      76.87738037 0.823472121125 1513.7968      -0.692211115
10482.25
## X1976      78.20088196      0.498580009 1513.7968      -0.454731479
10482.25
## X1977      72.50292969      0.526970029 1513.7968      -0.077001341
10482.25
## X1978      70.43634796 0.823472121125 1513.7968      -0.407767311
10482.25
## X1979      68.686409      0.5176 1513.7968      -0.598723606
10482.25
## X1980      66.82041931      0.530789971 1513.7968      -0.723988689
10482.25
## X1981      65.31529999      0.56941998 1513.7968      0.746376394

```

10482.25				
## X1982	66.52902222	0.823472121125	1513.7968	-0.974370015
10482.25				
## X1983	67.87513733	0.823472121125	1513.7968	1.205793532
10482.25				
## X1984	67.13456726	0.616020024	1513.7968	1.923874917
10482.25				
## X1985	65.65184021	0.607200027	1513.7968	-0.675514231
10482.25				
## X1986	65.52748871	0.627960026	1513.7968	-0.031759106
10482.25				
## X1987	64.64382935	0.623650014	1513.7968	0.859553061
10482.25				
## X1988	75.92489624	0.716489971	1513.7968	1.274500857
10482.25				
## X1989	75.52095795	0.726050019	1513.7968	-1.463854934
10482.25				
## X1990	78.3366394	0.753639996	1513.7968	0.871883498
10482.25				
## X1991	81.3958721171875	0.823472121125	1513.7968	0.98511228
10482.25				
## X1992	81.3958721171875	0.823472121125	1513.7968	-1.968324641
10482.25				
## X1993	81.3958721171875	0.823472121125	1513.7968	1.114252267
10482.25				
## X1994	81.3958721171875	0.823472121125	1513.7968	-1.890053635
10482.25				
## X1995	81.3958721171875	0.823472121125	1513.7968	-0.21916025
10482.25				
## X1996	81.3958721171875	0.823472121125	368.49	-0.974537457
10482.25				
## X1997	81.3958721171875	0.823472121125	396.28	-0.742232655
10482.25				
## X1998	81.3958721171875	0.823472121125	389.76	0.598563535
10482.25				
## X1999	81.3958721171875	0.823472121125	407.26	0.58981031
10482.25				
## X2000	81.3958721171875	0.823472121125	444.19	-0.038819601
10482.25				
## X2001	81.3958721171875	0.823472121125	434.28	-0.447797985
10482.25				
## X2002	81.3958721171875	0.823472121125	420.78	-0.212488255
3995				
## X2003	81.3958721171875	0.823472121125	566.83	-0.766146057
2159				
## X2004	81.3958721171875	0.823472121125	527.3	-0.550333531
4283				
## X2005	99.95349884	1.05332005	587.03	-1.328496187
3293				
## X2006	99.97512054	1.055780053	726.06	-1.623548138

6863				
## X2007	98.18898773	1.064299941	861.73	0.332700442
3995				
## X2008	95.1065979	1.085389972	1054.16	-0.768963293
4480				
## X2009	97.62580109	1.059589982	1163.91	-1.532171411
5625				
## X2010	99.73535156	1.079146981	1426.83	-0.71357452
4668				
## X2011	81.3958721171875	1.064528942	1385.91	-1.421523682
4181				
## X2012	81.3958721171875	0.823472121125	1913.43	-1.395397223
5359				
## X2013	81.3958721171875	0.823472121125	1786.71	-1.248977471
6022				
## X2014	81.3958721171875	0.823472121125	2227.1	-1.866888552
12061				
## X2015	81.3958721171875	0.823472121125	2150.99	0.582069931
12604				
## X2016	81.3958721171875	0.823472121125	2567.09	-1.017215458
21196				
## X2017	109.1253586	1.10079968	3059.56	1.361299636
28377				
## X2018	112.4276962	1.103870988	3039.88	-1.83614165
19343				
## X2019	81.3958721171875	0.823472121125	5012.04	-1.30354401
22079				
## X2020	118.4292374	1.145879984	4927.32	0.387748208
21475				
## X2021	115.4481812	1.135454297	1513.7968	-1.007848748
17587				
## X2022	117.6594543	0.823472121125	1513.7968	-0.340486292854839
10482.25				
## X2023	81.3958721171875	0.823472121125	1513.7968	-0.340486292854839
10482.25				
##	X140	X142		
## X1960	3.79775757575758	-0.487912878583333		
## X1961	3.79775757575758	-0.487912878583333		
## X1962	3.79775757575758	-0.487912878583333		
## X1963	3.79775757575758	-0.487912878583333		
## X1964	3.79775757575758	-0.487912878583333		
## X1965	3.79775757575758	-0.487912878583333		
## X1966	3.79775757575758	-0.487912878583333		
## X1967	3.79775757575758	-0.487912878583333		
## X1968	3.79775757575758	-0.487912878583333		
## X1969	3.79775757575758	-0.487912878583333		
## X1970	3.79775757575758	-0.487912878583333		
## X1971	3.79775757575758	-0.487912878583333		
## X1972	3.79775757575758	-0.487912878583333		
## X1973	3.79775757575758	-0.487912878583333		

## X1974	3.79775757575758	-0.487912878583333
## X1975	3.79775757575758	-0.487912878583333
## X1976	3.79775757575758	-0.487912878583333
## X1977	3.79775757575758	-0.487912878583333
## X1978	3.79775757575758	-0.487912878583333
## X1979	3.79775757575758	-0.487912878583333
## X1980	3.79775757575758	-0.487912878583333
## X1981	3.79775757575758	-0.487912878583333
## X1982	3.79775757575758	-0.487912878583333
## X1983	3.79775757575758	-0.487912878583333
## X1984	3.79775757575758	-0.487912878583333
## X1985	3.79775757575758	-0.487912878583333
## X1986	3.79775757575758	-0.487912878583333
## X1987	3.79775757575758	-0.487912878583333
## X1988	3.79775757575758	-0.487912878583333
## X1989	3.79775757575758	-0.487912878583333
## X1990	3.79775757575758	-0.487912878583333
## X1991	2.2	-0.487912878583333
## X1992	2.295	-0.487912878583333
## X1993	2.339	-0.487912878583333
## X1994	2.381	-0.487912878583333
## X1995	2.464	-0.487912878583333
## X1996	2.51	-0.058428358
## X1997	2.694	-0.487912878583333
## X1998	2.895	-0.085569881
## X1999	3.068	-0.487912878583333
## X2000	3.27	-0.227924496
## X2001	3.618	-0.487912878583333
## X2002	3.934	-0.432220519
## X2003	4.32	-0.551806808
## X2004	4.272	-0.672145784
## X2005	4.25	-0.569969237
## X2006	3.59	-0.451236516
## X2007	4.092	-0.573499918
## X2008	4.548	-0.442116976
## X2009	5	-0.289043039
## X2010	3.38	-0.268090695
## X2011	3.75	-0.31506893
## X2012	4.099	-0.401940674
## X2013	4.43	-0.405386388
## X2014	4.393	-0.473918706
## X2015	4.371	-0.512037396
## X2016	4.35	-0.583839417
## X2017	4.37	-0.615030944
## X2018	4.38	-0.742027104
## X2019	4.382	-0.741844893
## X2020	5.209	-0.769557953
## X2021	5.097	-0.77454257
## X2022	4.699	-0.752661884
## X2023	4.676	-0.487912878583333

```
#Create data frame to India
```

```
dfIN<-data.frame(df1)
```

```
dfIN<-df1[df1$Country.Code=="IND",]
```

```
India<-data.frame(t(dfIN[1:71,5:68]))
```

```
India<-India[1:64,1:53]
```

```
India
```

##		X143	X144	X145	X146
##	X1960	40.7477272727273	72.7459161689655	1.52368380575	0.465540724807692
##	X1961	40.7477272727273	72.7459161689655	1.52368380575	0.465540724807692
##	X1962	40.7477272727273	72.7459161689655	1.52368380575	0.465540724807692
##	X1963	40.7477272727273	72.7459161689655	1.52368380575	0.465540724807692
##	X1964	40.7477272727273	72.7459161689655	1.52368380575	0.465540724807692
##	X1965	40.7477272727273	72.7459161689655	1.52368380575	0.465540724807692
##	X1966	40.7477272727273	72.7459161689655	1.52368380575	0.465540724807692
##	X1967	40.7477272727273	72.7459161689655	1.52368380575	0.465540724807692
##	X1968	40.7477272727273	72.7459161689655	1.52368380575	0.465540724807692
##	X1969	40.7477272727273	72.7459161689655	1.52368380575	0.465540724807692
##	X1970	40.7477272727273	72.7459161689655	0.5398271	0.412892977
##	X1971	40.7477272727273	72.7459161689655	0.519456293	0.34317677
##	X1972	40.7477272727273	72.7459161689655	0.503650572	0.332986901
##	X1973	40.7477272727273	72.7459161689655	0.641097376	0.477874242
##	X1974	40.7477272727273	72.7459161689655	0.88419373	0.491996934
##	X1975	40.7477272727273	72.7459161689655	1.687321795	1.073210036
##	X1976	40.7477272727273	72.7459161689655	1.410100785	0.681242876
##	X1977	40.7477272727273	72.7459161689655	2.545900765	1.817336696
##	X1978	40.7477272727273	72.7459161689655	2.267426956	1.621190427
##	X1979	40.7477272727273	72.7459161689655	1.858221958	0.674075291
##	X1980	40.7477272727273	72.7459161689655	1.445653147	0.663076618
##	X1981	40.7477272727273	72.7459161689655	1.922020817	0.56985755
##	X1982	40.7477272727273	72.7459161689655	2.160070692	0.837339019
##	X1983	40.7477272727273	72.7459161689655	2.030156637	0.538922661
##	X1984	40.7477272727273	72.7459161689655	1.966280188	0.469239658
##	X1985	40.7477272727273	72.7459161689655	2.102058301	0.315767129
##	X1986	40.7477272727273	72.7459161689655	1.407417593	0.537981343
##	X1987	40.7477272727273	72.7459161689655	1.385142675	0.447544247
##	X1988	40.7477272727273	72.7459161689655	1.2492001	0.448165585
##	X1989	40.7477272727273	72.7459161689655	1.726064987	0.448210193
##	X1990	40.7477272727273	72.7459161689655	2.017096841	0.544712344
##	X1991	40.7477272727273	72.7459161689655	1.732547931	0.633772394
##	X1992	40.7477272727273	72.7459161689655	1.545738681	0.619983102
##	X1993	40.7477272727273	50.9	1.44288644	0.629014498
##	X1994	40.7477272727273	49.81130981	1.180102117	0.455473016
##	X1995	40.7477272727273	51.40877533	1.365472723	0.495177822
##	X1996	40.7477272727273	53.00352097	1.330016214	0.422706188
##	X1997	40.7477272727273	54.59486389	1.222729832	0.382143609
##	X1998	40.7477272727273	56.18213272	1.017818482	0.365723081
##	X1999	40.7477272727273	60.1	1.169109432	0.388545336
##	X2000	22.1	60.29283905	1.506125455	0.342973266

## X2001	23.1	62.00543976	1.246845879	0.331096696
## X2002	24.55	62.3	1.333599552	0.37417915
## X2003	25.7	65.41201019	1.251867518	0.341818488
## X2004	27	64.4	1.48641419	0.24451664
## X2005	28.1	68.8404541	1.82951156	0.213464418
## X2006	29.4	67.9	2.077395101	0.284269162
## X2007	31.1	72.3407135	2.385511349	0.303026557
## X2008	32.35	74.11849213	3.285133889	0.30110295
## X2009	34	75	1.587835157	0.260759906
## X2010	35.6	76.3	2.241486273	0.380636441
## X2011	38	79.51678467	2.552088603	0.354732294
## X2012	40	79.9	1.943188904	0.313210382
## X2013	42.8	83.13139343	1.812379913	0.283202329
## X2014	45.5	85.13391113	1.408576752	0.268202532
## X2015	48.55	88	0.89218519	0.298467427
## X2016	51.9	89.58630371	0.849895006	0.304148826
## X2017	55.5	91.79415894	0.867985809	0.209054527
## X2018	59.5	95.7	1.022725407	0.150445691
## X2019	63.3	95.88594055	0.853397081	0.157402582
## X2020	67.3	96.5	0.90181754	0.188802021
## X2021	71.1	99.57252502	1.620810611	0.163266862
## X2022	40.7477272727273	72.7459161689655	1.52368380575	0.465540724807692
## X2023	40.7477272727273	72.7459161689655	1.52368380575	0.465540724807692
##	X147	X148	X149	X153
## X1960	60.433377992459	41.74133512	38.7479619784783	1.13349619851613
## X1961	58.84319536	41.0924822	38.7479619784783	1.13349619851613
## X1962	59.35779415	39.0659688	38.7479619784783	1.13349619851613
## X1963	59.24747493	39.82535168	38.7479619784783	1.13349619851613
## X1964	59.43515214	41.34371671	38.7479619784783	1.13349619851613
## X1965	59.59154982	39.38469726	38.7479619784783	1.13349619851613
## X1966	59.71027751	40.35165124	38.7479619784783	1.13349619851613
## X1967	59.80344344	42.75155802	38.7479619784783	1.13349619851613
## X1968	59.99078431	42.08602738	38.7479619784783	1.13349619851613
## X1969	59.79839835	41.58492358	38.7479619784783	1.13349619851613
## X1970	59.88584652	40.28961346	38.7479619784783	1.13349619851613
## X1971	59.80680683	38.63339119	38.7479619784783	1.13349619851613
## X1972	59.85019457	38.6268263	38.7479619784783	1.13349619851613
## X1973	60.12094753	41.60382462	38.7479619784783	1.13349619851613
## X1974	60.29954359	38.8780587	38.7479619784783	1.13349619851613
## X1975	60.43811529	35.99691484	26.27939142	1.13349619851613
## X1976	60.42298003	34.31203671	27.08644537	1.13349619851613
## X1977	60.40347236	35.77714426	27.89349931	1.13349619851613
## X1978	60.74014779	34.27396271	28.70055325	1.13349619851613
## X1979	60.73611172	32.82553002	29.50760719	1.13349619851613
## X1980	60.63251928	34.40886781	30.31466113	1.13349619851613
## X1981	60.67590702	33.29769742	31.12171508	1.13349619851613
## X1982	60.80035248	32.32674969	31.92876902	1.13349619851613
## X1983	60.69642371	32.60653488	32.73582296	1.13349619851613
## X1984	61.0293994	31.38053041	33.5428769	1.13349619851613
## X1985	60.99172942	29.71813836	34.34993084	1.13349619851613

## X1986	60.94195124	28.64114627	34.395574	1.13349619851613
## X1987	61.06000626	27.9723784	34.44121715	1.13349619851613
## X1988	60.90798099	28.76982237	34.4868603	1.13349619851613
## X1989	61.04588001	27.8396058	34.53250346	1.13349619851613
## X1990	61.01628218	27.58488814	34.57814661	0.647451316
## X1991	61.07446884	27.66270541	35.34162863	0.683086373
## X1992	60.97995755	26.89691945	36.10511065	0.69007405
## X1993	61.00585566	27.05455877	36.86859267	0.703136167
## X1994	60.97524881	26.51993758	37.63207469	0.725622135
## X1995	60.85887548	24.45754779	38.39555671	0.76518964
## X1996	60.73913877	25.19930606	39.15903873	0.787231756
## X1997	60.87098369	24.24867451	39.92251037	0.817360076
## X1998	60.83499541	24.18045155	40.68599585	0.818720963
## X1999	60.88443725	22.97256189	41.44948479	0.866242339
## X2000	60.86896566	21.61106205	42.2129668	0.885077949
## X2001	60.70483218	21.61888489	43.25445989	0.883746998
## X2002	60.72938494	19.53454327	44.29595297	0.897242649
## X2003	60.62478348	19.59199798	45.33744606	0.905456602
## X2004	60.66716221	17.81469065	43.23926003	0.955470157
## X2005	60.58341377	17.62020696	43.49583333	0.984261473
## X2006	60.50941918	16.80944209	43.75240664	1.036533922
## X2007	60.4132262	16.75011976	44.00897994	1.123599482
## X2008	60.45930465	16.79094236	44.26555325	1.180361247
## X2009	60.56390611	16.74427016	44.52212656	1.278873603
## X2010	60.39741826	17.02650901	44.77869986	1.338033835
## X2011	60.43004315	17.19197356	44.77869986	1.396878498
## X2012	60.42062566	16.84537706	44.77869986	1.498204123
## X2013	60.43946065	17.14842354	44.77869986	1.5276744
## X2014	60.44955082	16.79193451	44.77869986	1.642465277
## X2015	60.43172485	16.17450811	44.77869986	1.631323487
## X2016	60.39909996	16.36380056	44.77869986	1.639914019
## X2017	60.2839388	16.55833141	44.77869986	1.704926721
## X2018	60.24356466	16.03163069	44.77869986	1.795595299
## X2019	60.21981337	16.7555683	44.77869986	1.752534366
## X2020	60.04586286	18.63553127	44.77869986	1.576093232
## X2021	60.04592643	17.32626325	38.7479619784783	1.13349619851613
## X2022	60.433377992459	16.73083551	38.7479619784783	1.13349619851613
## X2023	60.433377992459	27.7563632430159	38.7479619784783	1.13349619851613
##	X155	X156	X158	X159
## X1960	-0.388350743166667	4671.2431372549	63.4417364513333	14.9417735987727
## X1961	-0.388350743166667	4671.2431372549	63.4417364513333	14.9417735987727
## X1962	-0.388350743166667	4671.2431372549	63.4417364513333	14.9417735987727
## X1963	-0.388350743166667	4671.2431372549	63.4417364513333	14.9417735987727
## X1964	-0.388350743166667	4671.2431372549	63.4417364513333	14.9417735987727
## X1965	-0.388350743166667	4671.2431372549	63.4417364513333	14.9417735987727
## X1966	-0.388350743166667	4671.2431372549	63.4417364513333	14.9417735987727
## X1967	-0.388350743166667	4671.2431372549	63.4417364513333	14.9417735987727
## X1968	-0.388350743166667	4671.2431372549	63.4417364513333	14.9417735987727
## X1969	-0.388350743166667	4671.2431372549	63.4417364513333	14.9417735987727
## X1970	-0.388350743166667	4464.25	63.4417364513333	14.9417735987727

## X1971	-0.388350743166667	4194.75	49.09164859	9.762031651
## X1972	-0.388350743166667	4708.71	52.0151455	9.232099671
## X1973	-0.388350743166667	4675.44	49.39282378	9.831581034
## X1974	-0.388350743166667	4615.16	53.51861029	9.081814991
## X1975	-0.388350743166667	4377.03	51.33486954	7.295552195
## X1976	-0.388350743166667	4535.35	54.14840768	8.573584314
## X1977	-0.388350743166667	4576.35	52.99409672	8.777171119
## X1978	-0.388350743166667	4440.62	48.32060583	7.484055027
## X1979	-0.388350743166667	4818.87	49.87635281	9.902650728
## X1980	-0.388350743166667	4758.96	51.04435715	9.463231669
## X1981	-0.388350743166667	4495.18	53.45953299	7.809565662
## X1982	-0.388350743166667	4527.83	56.81924202	6.552875036
## X1983	-0.388350743166667	4420.35	57.27730429	4.815674412
## X1984	-0.388350743166667	4518.37	58.1204438	4.00055812
## X1985	-0.388350743166667	4634.42	62.35772707	6.315665435
## X1986	-0.388350743166667	4599.94	63.68650445	5.300916205
## X1987	-0.388350743166667	4841.66	68.86419152	5.947143571
## X1988	-0.388350743166667	4720.11	67.40176817	6.184235008
## X1989	-0.388350743166667	4511.75	68.05104886	7.615272913
## X1990	-0.388350743166667	4362.81	65.46363226	8.259887793
## X1991	-0.388350743166667	4608.11	67.06780765	8.797442832
## X1992	-0.388350743166667	4540.4	68.03823466	11.04552069
## X1993	-0.388350743166667	4579.72	70.053347	11.98499323
## X1994	-0.388350743166667	4499.4	67.70731782	12.19736885
## X1995	-0.388350743166667	4682.32	69.93626965	13.05507749
## X1996	-0.381090343	4614.64	70.47678379	14.2569889
## X1997	-0.388350743166667	4409.07	68.93212716	14.93412171
## X1998	-0.258726746	4749	66.79569867	17.23037626
## X1999	-0.388350743166667	4645.18	66.95787603	20.06241322
## X2000	-0.403301805	4594.56	68.49942425	20.44553977
## X2001	-0.388350743166667	4633.24	69.41705728	20.08046084
## X2002	-0.55538249	4863.87	69.89346472	20.3527755
## X2003	-0.456320524	4760.38	67.83142323	19.663346
## X2004	-0.448476195	4738.89	67.69168015	21.38063836
## X2005	-0.363160849	4711.06	66.85963647	22.05265263
## X2006	-0.274562806	4781.4	66.68824892	23.46924171
## X2007	-0.397690296	4731.25	65.48205784	24.96960723
## X2008	-0.339097977	4634.73	68.44469591	25.79397946
## X2009	-0.452406287	5035.83	66.96802144	27.4526763
## X2010	-0.463754565	5065.02	67.17829809	28.34760875
## X2011	-0.540835857	4661.25	66.75997826	29.38204199
## X2012	-0.51396811	4773.66	71.63605506	31.49652228
## X2013	-0.517085731	4611.32	72.52273811	32.47555404
## X2014	-0.457155108	4800.06	74.49218587	34.30552375
## X2015	-0.406170607	4938.64	75.30939896	14.9417735987727
## X2016	-0.336941868	5069.89	63.4417364513333	14.9417735987727
## X2017	-0.291451544	5010.39	63.4417364513333	14.9417735987727
## X2018	-0.229412422	4954.03	63.4417364513333	14.9417735987727
## X2019	-0.302205294	4976.37	63.4417364513333	14.9417735987727
## X2020	-0.29291603	4761.81	63.4417364513333	14.9417735987727

## X2021	-0.316493511	4671.2431372549	63.4417364513333	14.9417735987727
## X2022	-0.321810871	4671.2431372549	63.4417364513333	14.9417735987727
## X2023	-0.388350743166667	4671.2431372549	63.4417364513333	14.9417735987727
##	X160	X161	X162	X163
## X1960	5.25571428571429	384.263489536364	5.921	55.5283606557377
## X1961	5.25571428571429	384.263489536364	5.937	22.27
## X1962	5.25571428571429	384.263489536364	5.953	21.96
## X1963	5.25571428571429	384.263489536364	5.969	22.45
## X1964	5.25571428571429	384.263489536364	5.979	22.98
## X1965	5.25571428571429	384.263489536364	5.941	21.92
## X1966	5.25571428571429	384.263489536364	5.881	21.82
## X1967	5.25571428571429	384.263489536364	5.825	23.17
## X1968	5.25571428571429	384.263489536364	5.76	24.59
## X1969	5.25571428571429	384.263489536364	5.684	25.38
## X1970	5.25571428571429	384.263489536364	5.624	26.82
## X1971	5.25571428571429	266.3479823	5.565	27.13
## X1972	5.25571428571429	266.5058047	5.482	25.91
## X1973	5.25571428571429	268.0001402	5.402	27.92
## X1974	5.25571428571429	272.3023465	5.325	26.9
## X1975	5.25571428571429	275.7213509	5.195	30.04
## X1976	5.25571428571429	280.5265006	5.13	29.75
## X1977	5.25571428571429	282.2605319	5.007	32.04
## X1978	5.25571428571429	279.8974845	4.888	33.18
## X1979	5.25571428571429	286.2700006	4.808	31.54
## X1980	5.25571428571429	287.0362736	4.775	32.65
## X1981	5.25571428571429	294.7783662	4.698	35.12
## X1982	5.25571428571429	299.3389674	4.62	34.81
## X1983	5.25571428571429	302.1546474	4.565	39.11
## X1984	5.25571428571429	307.6466998	4.516	39.72
## X1985	5.25571428571429	316.5600011	4.432	40.49
## X1986	5.25571428571429	320.5043637	4.399	41.1
## X1987	5.25571428571429	325.4578276	4.311	40.83
## X1988	5.25571428571429	335.7559583	4.222	44.88
## X1989	5.25571428571429	344.037189	4.132	47.38
## X1990	5.25571428571429	351.2121381	4.045	47.88
## X1991	5.25571428571429	358.3040361	3.959	49.15
## X1992	5.25571428571429	363.7716254	3.877	50.93
## X1993	5.25571428571429	364.92868	3.799	52.08
## X1994	5.25571428571429	371.3593888	3.723	53.73
## X1995	5.25571428571429	384.9494693	3.651	55.18
## X1996	5.25571428571429	389.063748	3.582	56.91
## X1997	5.25571428571429	396.8091963	3.514	58.84
## X1998	5.25571428571429	398.7357669	3.446	60.09
## X1999	5.25571428571429	413.9886369	3.383	62.94
## X2000	6.42	416.0832875	3.35	62.71
## X2001	6.22	414.4834306	3.303	64.8
## X2002	6.16	419.3542748	3.217	60.16
## X2003	5.84	422.0570988	3.122	66.28
## X2004	5.73	437.1330757	3.046	65.48
## X2005	5.52	447.0279363	2.958	68.89

## X2006	5.39	463.3997779	2.864	72.55
## X2007	5.31	482.4564401	2.784	78.64
## X2008	5.43	499.0387996	2.718	80.37
## X2009	5.5	541.9943768	2.673	78.84
## X2010	5.34	558.7865616	2.603	84.84
## X2011	5.28	574.6241119	2.536	90.1
## X2012	5.29	595.0623412	2.467	92.35
## X2013	5.11	600.9660369	2.406	96.6
## X2014	5.08	630.9008678	2.306	99.25
## X2015	4.82	384.263489536364	2.287	98.49
## X2016	4.54	384.263489536364	2.273	102.26
## X2017	4.46	384.263489536364	2.2	108.86
## X2018	4.4	384.263489536364	2.177	114.18
## X2019	4.25	384.263489536364	2.109	116.09
## X2020	4.28	384.263489536364	2.051	120.06
## X2021	5.25571428571429	384.263489536364	4.07172131147541	123.84
## X2022	5.25571428571429	384.263489536364	4.07172131147541	55.5283606557377
## X2023	5.25571428571429	384.263489536364	4.07172131147541	55.5283606557377
##	X164	X165	X166	
X169				
## X1960	23.0374971834375	54.6560743265909	5.14013263801613	
0.00394576945833333				
## X1961	23.0374971834375	54.6560743265909	3.722742533	
0.00394576945833333				
## X1962	23.0374971834375	54.6560743265909	2.931127735	
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## X1963	23.0374971834375	54.6560743265909	5.994353262	
0.00394576945833333				
## X1964	23.0374971834375	54.6560743265909	7.452950123	
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## X1965	23.0374971834375	54.6560743265909	-2.63577011	
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## X1966	23.0374971834375	54.6560743265909	-0.05532877	
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## X1967	23.0374971834375	54.6560743265909	7.825963031	
0.00394576945833333				
## X1968	23.0374971834375	54.6560743265909	3.387929176	
0.00394576945833333				
## X1969	23.0374971834375	54.6560743265909	6.539700299	
0.00394576945833333				
## X1970	23.0374971834375	54.6560743265909	5.157229737	
0.00394576945833333				
## X1971	23.0374971834375	35.11979343	1.642930375	
0.00394576945833333				
## X1972	23.0374971834375	35.22633466	-0.553301305	
0.00394576945833333				
## X1973	23.0374971834375	35.31958299	3.295521135	
0.00394576945833333				
## X1974	23.0374971834375	36.46745679	1.185336255	
0.00394576945833333				

## X1975 23.0374971834375 0.00394576945833333	36.9354604	9.149912016
## X1976 23.0374971834375 0.00394576945833333	37.85033548	1.663103638
## X1977 23.0374971834375 0.00394576945833333	38.22397866	7.254764588
## X1978 23.0374971834375 0.00394576945833333	37.21770194	5.712532089
## X1979 23.0374971834375 0.00394576945833333	38.70258161	-5.238182704
## X1980 23.0374971834375 0.00394576945833333	39.38335072	6.735821529
## X1981 23.0374971834375 0.00394576945833333	41.41914116	6.006203626
## X1982 23.0374971834375 0.00394576945833333	43.0251332	3.47573324
## X1983 23.0374971834375 0.00394576945833333	43.85183637	7.288892903
## X1984 23.0374971834375 0.00394576945833333	45.17457373	3.820737856
## X1985 23.0374971834375 0.00394576945833333	47.22557302	5.254299223
## X1986 23.0374971834375 0.00394576945833333	48.25300177	4.776564168
## X1987 23.0374971834375 0.00394576945833333	49.68344915	3.965355635
## X1988 23.0374971834375 0.00394576945833333	51.24904856	9.627782916
## X1989 23.0374971834375 0.00394576945833333	52.81420226	5.947343332
## X1990 21.50484833 0.00394576945833333	53.76395973	5.533454561
## X1991 21.627713 0.00394576945833333	55.0634924	1.056831435
## X1992 21.75057766 0.00394576945833333	56.07028245	5.48239602
## X1993 21.87344233 0.00394576945833333	56.95683361	4.750776218
## X1994 21.996307 0.00394576945833333	58.01455003	6.65892407
## X1995 22.11917166 0.00394576945833333	59.98794193	7.574491838
## X1996 22.24203633 0.111606687	60.8251558	7.549522249
## X1997 22.364901 0.00394576945833333	61.77329025	4.04982085
## X1998 22.48776567 0.114457399	62.01581767	6.184415822
## X1999 22.61063033 0.00394576945833333	63.46040016	8.845755559

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## X2000	22.733495	63.72739451	3.840991157	-
0.187351525				
## X2001	22.7975676	63.64796634	4.823966266	
0.00394576945833333				
## X2002	22.86164019	64.32920579	3.803975321	-
0.189068422				
## X2003	22.92571279	64.51923944	7.860381476	-
0.143909425				
## X2004	22.98978538	65.58374371	7.922936613	-
0.179698884				
## X2005	23.05385798	65.98980361	7.923430621	-
0.098774634				
## X2006	23.11793057	66.80567371	8.060732572	-
0.095376492				
## X2007	23.18200317	67.88343297	7.660815066	
0.136991709				
## X2008	23.24607576	69.00512159	3.08669806	-
0.009732914				
## X2009	23.31014836	71.14349792	7.861888832	-
0.003295789				
## X2010	23.37422095	71.40469516	8.497584702	
0.031655986				
## X2011	23.46382169	71.4717185	5.241315002	
0.02255407				
## X2012	23.55342242	72.41907946	5.456388753	-
0.156087115				
## X2013	23.64302315	72.28545864	6.386106401	-
0.156965882				
## X2014	23.73262388	73.57697909	7.410227601	-
0.222162053				
## X2015	23.82222461	54.6560743265909	7.99625379	
0.080021866				
## X2016	23.91182535	54.6560743265909	8.256305499	
0.061384145				
## X2017	24.00142608	54.6560743265909	6.795383423	
0.040755548				
## X2018	24.09102681	54.6560743265909	6.453851341	
0.262748897				
## X2019	24.18062754	54.6560743265909	3.871436939	
0.130844653				
## X2020	24.27022827	54.6560743265909	-5.831053221	
0.375041097				
## X2021	24.35982901	54.6560743265909	9.050277909	
0.25085631				
## X2022	23.0374971834375	54.6560743265909	7.239693281	
0.370331407				
## X2023	23.0374971834375	54.6560743265909	5.14013263801613	
0.00394576945833333				
##	X171	X172	X173	X175
X176				

## X1960	35.7956862745098	937.101176470588	0.458986908	8.405593490125
55.6233125				
## X1961	35.7956862745098	937.101176470588	0.58260747604	8.405593490125
55.6233125				
## X1962	35.7956862745098	937.101176470588	0.58260747604	8.405593490125
55.6233125				
## X1963	35.7956862745098	937.101176470588	0.58260747604	8.405593490125
55.6233125				
## X1964	35.7956862745098	937.101176470588	0.58260747604	8.405593490125
55.6233125				
## X1965	35.7956862745098	937.101176470588	0.58260747604	8.405593490125
55.6233125				
## X1966	35.7956862745098	937.101176470588	0.58260747604	8.405593490125
55.6233125				
## X1967	35.7956862745098	937.101176470588	0.58260747604	8.405593490125
55.6233125				
## X1968	35.7956862745098	937.101176470588	0.58260747604	8.405593490125
55.6233125				
## X1969	35.7956862745098	937.101176470588	0.58260747604	8.405593490125
55.6233125				
## X1970	31.43	941.44	0.604499996	8.405593490125
55.6233125				
## X1971	14.04	936.1	0.58260747604	8.405593490125
55.6233125				
## X1972	28.97	987.55	0.58260747604	8.405593490125
55.6233125				
## X1973	34.3	942.08	0.58260747604	8.405593490125
55.6233125				
## X1974	25	999.21	0.58260747604	8.405593490125
55.6233125				
## X1975	23.86	1012.83	0.588199973	8.405593490125
55.6233125				
## X1976	19.73	929.24	0.58260747604	8.405593490125
55.6233125				
## X1977	22.65	937.13	0.58260747604	8.405593490125
55.6233125				
## X1978	29.04	993.53	0.58260747604	8.405593490125
55.6233125				
## X1979	31.62	937.45	0.58260747604	8.405593490125
55.6233125				
## X1980	29.41	906.1	0.769699991	8.405593490125
55.6233125				
## X1981	27.5	963.76	0.769400001	8.405593490125
55.6233125				
## X1982	27.1	983.74	0.58260747604	8.405593490125
55.6233125				
## X1983	33.84	1022.06	0.58260747604	8.405593490125
55.6233125				
## X1984	26.13	978.28	0.58260747604	8.405593490125
55.6233125				

## X1985	25.46	907.25	0.769200027	8.405593490125
55.6233125				
## X1986	24.42	987.41	0.58260747604	8.405593490125
55.6233125				
## X1987	38.93	938.63	0.718200028	8.405593490125
55.6233125				
## X1988	37.6	870.22	0.58260747604	8.405593490125
55.6233125				
## X1989	27.52	1021.06	0.58260747604	8.405593490125
55.6233125				
## X1990	27.59	884.65	0.58260747604	0
55.954				
## X1991	35.08	974.46	0.787000001	0
55.909				
## X1992	28.34	959.74	0.58260747604	0.000111308
55.886				
## X1993	35.59	917.63	0.58260747604	0.000218176
55.885				
## X1994	32.48	902.41	0.58260747604	0.001069562
55.905				
## X1995	36.77	953.37	0.58260747604	0.026228879
56.473				
## X1996	32.67	947.31	0.58260747604	0.046333977
57.04				
## X1997	27.55	1024.4	0.58260747604	0.070767849
57.608				
## X1998	50.13	920.66	0.58260747604	0.139027329
58.175				
## X1999	30.57	895.82	0.58260747604	0.273224277
58.742				
## X2000	33.86	914.86	0.65	0.52753245
59.308				
## X2001	33.35	908.11	0.64	0.660146377
58.794				
## X2002	43.69	896.38	0.63	1.537875582
58.279				
## X2003	38.71	966.41	0.899999976	1.686489971
57.762				
## X2004	37.19	912.08	0.58260747604	1.976136492
57.241				
## X2005	39.46	937.29	0.41	2.388075
56.716				
## X2006	39.11	851.56	0.42	2.805499865
56.742				
## X2007	41.4	873.6	0.41	3.95
56.766				
## X2008	27.91	919.68	0.41	4.38
56.791				
## X2009	44.66	863.04	0.44	5.12
56.818				

## X2010	52.52	917.82	0.47	7.5
56.847				
## X2011	38.28	938.08	0.63	10.07
56.173				
## X2012	41.45	975.68	0.49	11.1
55.501				
## X2013	40.79	939.94	0.49	12.3
54.595				
## X2014	45.04	977.7	0.52	13.5
53.702				
## X2015	49.98	937.26	0.58	14.9
52.822				
## X2016	59.01	811.98	0.48	16.5
51.942				
## X2017	56.82	846.83	0.53	18.2
51.064				
## X2018	51.05	924.59	0.58260747604	20.08130004
50.187				
## X2019	59.68	967.32	0.58260747604	29.52351142
52.08				
## X2020	56.3	936.43	0.58260747604	43.40544313
50.896				
## X2021	35.7956862745098	937.101176470588	0.58260747604	46.31
51.343				
## X2022	35.7956862745098	937.101176470588	0.58260747604	8.405593490125
55.6233125				
## X2023	35.7956862745098	937.101176470588	0.58260747604	8.405593490125
55.6233125				
##	X177	X178	X179	X182
## X1960	33.1197325954545	57.5370235826087	45.218	0.544724350612903
## X1961	33.1197325954545	57.5370235826087	45.398	0.544724350612903
## X1962	33.1197325954545	57.5370235826087	45.659	0.544724350612903
## X1963	33.1197325954545	57.5370235826087	45.936	0.544724350612903
## X1964	33.1197325954545	57.5370235826087	46.184	0.544724350612903
## X1965	33.1197325954545	57.5370235826087	44.98	0.544724350612903
## X1966	33.1197325954545	57.5370235826087	45.333	0.544724350612903
## X1967	33.1197325954545	57.5370235826087	45.674	0.544724350612903
## X1968	33.1197325954545	57.5370235826087	47.471	0.544724350612903
## X1969	33.1197325954545	57.5370235826087	47.857	0.544724350612903
## X1970	33.1197325954545	57.5370235826087	48.241	0.544724350612903
## X1971	33.1197325954545	57.5370235826087	48.632	0.544724350612903
## X1972	33.1197325954545	57.5370235826087	49.025	0.544724350612903
## X1973	33.1197325954545	57.5370235826087	49.539	0.544724350612903
## X1974	33.1197325954545	57.5370235826087	50.244	0.544724350612903
## X1975	33.1197325954545	39.02238653	50.812	0.544724350612903
## X1976	33.1197325954545	40.22078456	51.388	0.544724350612903
## X1977	33.1197325954545	41.41918258	51.909	0.544724350612903
## X1978	33.1197325954545	42.61758061	52.492	0.544724350612903
## X1979	33.1197325954545	43.81597864	53.06	0.544724350612903
## X1980	33.1197325954545	45.01437667	53.611	0.544724350612903

## X1981	33.1197325954545	46.2127747	54.175	0.544724350612903
## X1982	33.1197325954545	47.41117273	54.732	0.544724350612903
## X1983	33.1197325954545	48.60957075	55.281	0.544724350612903
## X1984	33.1197325954545	49.80796878	55.816	0.544724350612903
## X1985	33.1197325954545	51.00636681	56.334	0.544724350612903
## X1986	33.1197325954545	51.07414253	56.835	0.544724350612903
## X1987	33.1197325954545	51.14191826	57.315	0.544724350612903
## X1988	33.1197325954545	51.20969398	57.777	0.544724350612903
## X1989	33.1197325954545	51.27746971	58.233	0.544724350612903
## X1990	33.1197325954545	51.34524543	58.652	0.606670606
## X1991	33.1197325954545	52.47894331	59.055	0.601149296
## X1992	33.1197325954545	53.6126412	59.452	0.590294839
## X1993	33.1197325954545	54.74633908	59.815	0.582869304
## X1994	33.1197325954545	55.88003697	60.216	0.576153026
## X1995	33.1197325954545	57.01373485	60.596	0.575797726
## X1996	33.1197325954545	58.14743274	60.984	0.5747032
## X1997	33.1197325954545	59.28113062	61.388	0.572953589
## X1998	33.1197325954545	60.41482851	61.792	0.569992845
## X1999	33.1197325954545	61.54852639	62.207	0.566711866
## X2000	34.749808	62.68222428	62.669	0.56119655
## X2001	33.7515607	64.22874204	63.091	0.553613263
## X2002	33.7534865	65.77525981	63.616	0.538117876
## X2003	33.3756866	67.32177757	64.094	0.536229694
## X2004	33.2483983	64.2061717	64.524	0.533884853
## X2005	33.251224	64.58715855	64.996	0.537033444
## X2006	33.124805	64.96814541	65.412	0.536865223
## X2007	33.1258523	65.34913227	65.788	0.540112275
## X2008	32.8749385	65.73011912	66.149	0.539671346
## X2009	33.7540385	66.11110598	66.513	0.532442998
## X2010	33.248998	66.49209283	66.909	0.531135091
## X2011	32.6255724	66.49209283	67.359	0.52972054
## X2012	33.2509598	66.49209283	67.887	0.522129893
## X2013	32.6251325	66.49209283	68.46	0.518600782
## X2014	32.7502237	66.49209283	69.074	0.515631698
## X2015	32.7485085	66.49209283	69.636	0.513150148
## X2016	33.7488876	66.49209283	70.117	0.511300777
## X2017	33.3755332	66.49209283	70.467	0.507153694
## X2018	32.7504196	66.49209283	70.71	0.508029136
## X2019	32.7497783	66.49209283	70.91	0.50352521
## X2020	31.8756492	66.49209283	70.15	0.499614081
## X2021	31.8746559	57.5370235826087	57.9975245901639	0.544724350612903
## X2022	33.1197325954545	57.5370235826087	57.9975245901639	0.544724350612903
## X2023	33.1197325954545	57.5370235826087	57.9975245901639	0.544724350612903
##	X183	X184	X185	X186
## X1960	242.8	52264	0.179930734096774	6011.0243902439
## X1961	239.3	114181	0.179930734096774	6011.0243902439
## X1962	236.1	110398	0.179930734096774	6011.0243902439
## X1963	233.2	48986	0.179930734096774	6011.0243902439
## X1964	230.4	5837	0.179930734096774	6011.0243902439
## X1965	227.8	19077	0.179930734096774	6011.0243902439

## X1966	225.3	-144807	0.179930734096774	6011.0243902439
## X1967	222.7	-124336	0.179930734096774	6011.0243902439
## X1968	220.2	-184326	0.179930734096774	6011.0243902439
## X1969	217.5	-171683	0.179930734096774	6011.0243902439
## X1970	214.5	-45792	0.179930734096774	6011.0243902439
## X1971	211.4	-220417	0.179930734096774	6011.0243902439
## X1972	208.1	-60291	0.179930734096774	6011.0243902439
## X1973	204.4	-62763	0.179930734096774	6011.0243902439
## X1974	200.3	-168162	0.179930734096774	6011.0243902439
## X1975	195.9	-225989	0.179930734096774	6011.0243902439
## X1976	190.9	-436104	0.179930734096774	6011.0243902439
## X1977	185.6	-31092	0.179930734096774	6011.0243902439
## X1978	180.1	-13841	0.179930734096774	6011.0243902439
## X1979	174.5	68198	0.179930734096774	6011.0243902439
## X1980	169	202323	0.179930734096774	1207
## X1981	163.8	23662	0.179930734096774	1067
## X1982	159	-26106	0.179930734096774	1128
## X1983	154.5	46174	0.179930734096774	6011.0243902439
## X1984	150.3	-57788	0.179930734096774	1003
## X1985	146.2	-112781	0.179930734096774	982
## X1986	142.2	-258917	0.179930734096774	999
## X1987	138.2	-232178	0.179930734096774	988
## X1988	134.2	-103742	0.179930734096774	1033
## X1989	130.3	-13987	0.179930734096774	1048
## X1990	126.5	108465	0.166199184	1147
## X1991	122.9	-158007	0.167411846	1267
## X1992	119.5	8198	0.168544223	1248
## X1993	116.2	2440	0.168958209	1209
## X1994	112.8	110095	0.171610933	1588
## X1995	109.4	-57139	0.171868252	1545
## X1996	106	-26079	0.173610315	1661
## X1997	102.5	1240	0.175505098	1926
## X1998	98.9	-28485	0.17604763	2247
## X1999	95.3	-106592	0.175746921	2206
## X2000	91.6	-149966	0.169467854	2206
## X2001	88	-177306	0.170285654	2379
## X2002	84.5	-208070	0.161835006	2693
## X2003	81.1	-255516	0.16550171	3425
## X2004	77.7	-214351	0.168606809	4014
## X2005	74.4	-550186	0.174273995	4721
## X2006	71.1	-678231	0.179809302	5686
## X2007	67.8	-769184	0.185193933	6296
## X2008	64.5	-846785	0.186460897	6425
## X2009	61.3	-803437	0.187954584	7262
## X2010	58.1	-380087	0.192352579	8853
## X2011	55	-244114	0.196013872	8841
## X2012	52	-180991	0.192039815	9553
## X2013	49.1	-236387	0.189788658	10669
## X2014	46.2	-310694	0.189549174	12040
## X2015	43.6	-475094	0.190340569	12579

## X2016	41	68119	0.187475659	13199
## X2017	38.7	-219656	0.188611157	14961
## X2018	36.4	-561563	0.191559628	16289
## X2019	34.3	-593495	0.195425249	19454
## X2020	32.4	-34772	0.199804042	23141
## X2021	30.6	-163469.37704918	0.179930734096774	26267
## X2022	131.259677419355	-163469.37704918	0.179930734096774	6011.0243902439
## X2023	131.259677419355	-163469.37704918	0.179930734096774	6011.0243902439
##	X188	X190	X191	X192
## X1960	28.1636080763043	-1.06587861229167	3.291464021	305.112904460656
## X1961	28.1636080763043	-1.06587861229167	3.329064654	153.4889718
## X1962	28.1636080763043	-1.06587861229167	3.385369906	157.0784891
## X1963	28.1636080763043	-1.06587861229167	3.450237298	160.7477554
## X1964	28.1636080763043	-1.06587861229167	3.508184219	164.4897598
## X1965	28.1636080763043	-1.06587861229167	3.55053982	168.2080008
## X1966	28.1636080763043	-1.06587861229167	3.577399045	171.8667885
## X1967	28.1636080763043	-1.06587861229167	3.590134046	175.5646524
## X1968	28.1636080763043	-1.06587861229167	3.596909595	179.4139994
## X1969	28.1636080763043	-1.06587861229167	3.607890468	183.4106364
## X1970	28.1636080763043	-1.06587861229167	3.624713332	187.5094767
## X1971	28.1636080763043	-1.06587861229167	3.649822193	191.7130012
## X1972	28.1636080763043	-1.06587861229167	3.686205517	196.0311897
## X1973	28.1636080763043	-1.06587861229167	3.730871051	200.4942446
## X1974	28.1636080763043	-1.06587861229167	3.778778088	205.0733223
## X1975	28.1636080763043	-1.06587861229167	3.827192958	209.7155644
## X1976	28.1636080763043	-1.06587861229167	3.873631176	214.3998359
## X1977	28.1636080763043	-1.06587861229167	3.913166165	219.1873469
## X1978	28.1636080763043	-1.06587861229167	3.944332684	224.0918878
## X1979	28.1636080763043	-1.06587861229167	3.968269162	229.1304568
## X1980	28.1636080763043	-1.06587861229167	3.984675728	234.3706204
## X1981	28.1636080763043	-1.06587861229167	3.995323488	239.7658064
## X1982	28.1636080763043	-1.06587861229167	4.003416748	245.24819
## X1983	28.1636080763043	-1.06587861229167	4.00990695	250.850617
## X1984	28.1636080763043	-1.06587861229167	4.015224538	256.5914577
## X1985	28.1636080763043	-1.06587861229167	4.020972035	262.4259075
## X1986	28.1636080763043	-1.06587861229167	4.027811959	268.3578893
## X1987	28.1636080763043	-1.06587861229167	4.036383738	274.357214
## X1988	28.1636080763043	-1.06587861229167	4.04747723	280.4158769
## X1989	28.1636080763043	-1.06587861229167	4.061814407	286.5651617
## X1990	28.1636080763043	-1.06587861229167	4.080536752	292.7670835
## X1991	28.1636080763043	-1.06587861229167	4.104088514	298.9858556
## X1992	28.1636080763043	-1.06587861229167	4.132031107	305.2526239
## X1993	28.1636080763043	-1.06587861229167	4.164176608	311.5681463
## X1994	28.1636080763043	-1.06587861229167	4.200377593	317.9285407
## X1995	28.1636080763043	-1.06587861229167	4.240553463	324.3247586
## X1996	28.1636080763043	-0.972584128	4.2848545	330.7159038
## X1997	28.1636080763043	-1.06587861229167	4.332566509	337.1245127
## X1998	28.1636080763043	-1.20082128	4.38349294	343.5483693
## X1999	28.1636080763043	-1.06587861229167	4.437660127	349.9608347
## X2000	6.096392313	-1.00120759	4.493683062	356.3962192

## X2001	7.399400388	-1.06587861229167	4.551883114	362.9000861
## X2002	8.782426344	-1.210664988	4.613991159	369.4056011
## X2003	10.17746712	-1.50999701	4.677712821	375.8303785
## X2004	12.56089644	-1.28043294	4.737673409	382.1701886
## X2005	14.66108933	-1.013880491	4.793042956	388.3501266
## X2006	16.76951846	-1.065184236	4.846329949	394.3151255
## X2007	18.96300541	-1.154295802	4.898343297	400.1398528
## X2008	21.16935265	-1.109707355	4.95067779	405.8720788
## X2009	23.38820895	-1.355547905	5.005686273	411.5580101
## X2010	25.6195429	-1.2779845	5.065987426	417.2668481
## X2011	27.86325391	-1.32679534	5.135396172	422.9871589
## X2012	30.11935259	-1.289309859	5.217438256	428.659862
## X2013	32.38714535	-1.229174137	5.315839598	434.2581749
## X2014	34.66598361	-0.99791199	5.45741729	439.6780929
## X2015	36.95517413	-0.954773545	5.640294939	444.931708
## X2016	39.25401861	-0.960426509	5.835516764	450.2357199
## X2017	41.47564339	-0.774099052	6.040795894	455.468934
## X2018	43.62501301	-0.997705162	6.254069446	460.4493174
## X2019	45.76642277	-0.796840608	6.47202495	465.1946394
## X2020	47.89959768	-0.841136158	6.672320068	469.6595667
## X2021	50.0241473	-0.691997945	4.36268270434426	473.4187327
## X2022	52.1399331	-0.568608165	4.36268270434426	305.112904460656
## X2023	28.1636080763043	-1.06587861229167	4.36268270434426	305.112904460656
##	X194	X195	X197	X198
## X1960	11.23333333333333	16.5285714285714	10.5361899151154	34.9170134167647
## X1961	11.23333333333333	16.5285714285714	10.5361899151154	34.9170134167647
## X1962	11.23333333333333	16.5285714285714	10.5361899151154	34.9170134167647
## X1963	11.23333333333333	16.5285714285714	10.5361899151154	34.9170134167647
## X1964	11.23333333333333	16.5285714285714	10.5361899151154	34.9170134167647
## X1965	11.23333333333333	16.5285714285714	10.5361899151154	34.9170134167647
## X1966	11.23333333333333	16.5285714285714	10.5361899151154	34.9170134167647
## X1967	11.23333333333333	16.5285714285714	10.5361899151154	34.9170134167647
## X1968	11.23333333333333	16.5285714285714	10.5361899151154	34.9170134167647
## X1969	11.23333333333333	16.5285714285714	10.5361899151154	34.9170134167647
## X1970	11.23333333333333	16.5285714285714	10.5361899151154	34.9170134167647
## X1971	11.23333333333333	16.5285714285714	10.5361899151154	34.9170134167647
## X1972	11.23333333333333	16.5285714285714	10.5361899151154	34.9170134167647
## X1973	11.23333333333333	16.5285714285714	10.5361899151154	34.9170134167647
## X1974	11.23333333333333	16.5285714285714	10.5361899151154	34.9170134167647
## X1975	5.3	16.5285714285714	10.5361899151154	34.9170134167647
## X1976	5.5	16.5285714285714	10.5361899151154	34.9170134167647
## X1977	5.7	16.5285714285714	10.5361899151154	34.9170134167647
## X1978	5.9	16.5285714285714	10.5361899151154	34.9170134167647
## X1979	6.1	16.5285714285714	10.5361899151154	34.9170134167647
## X1980	6.3	16.5285714285714	10.5361899151154	34.9170134167647
## X1981	6.6	16.5285714285714	10.5361899151154	34.9170134167647
## X1982	6.8	16.5285714285714	10.5361899151154	34.9170134167647
## X1983	7	16.5285714285714	10.5361899151154	34.9170134167647
## X1984	7.3	16.5285714285714	10.5361899151154	34.9170134167647
## X1985	7.5	16.5285714285714	10.5361899151154	34.9170134167647

## X1986	7.8	16.5285714285714	10.5361899151154	34.9170134167647
## X1987	8	16.5285714285714	10.5361899151154	34.9170134167647
## X1988	8.3	16.5285714285714	10.5361899151154	34.9170134167647
## X1989	8.6	16.5285714285714	10.5361899151154	34.9170134167647
## X1990	8.9	16.5285714285714	10.5361899151154	35.14816408
## X1991	9.1	16.5285714285714	10.5361899151154	35.24410486
## X1992	9.4	16.5285714285714	10.5361899151154	35.37061943
## X1993	9.7	16.5285714285714	10.5361899151154	35.53903818
## X1994	10.1	16.5285714285714	10.5361899151154	35.76764013
## X1995	10.4	16.5285714285714	10.5361899151154	35.96228844
## X1996	10.7	16.5285714285714	10.5361899151154	36.16501815
## X1997	11.1	16.5285714285714	7.155963303	36.37639752
## X1998	11.4	16.5285714285714	8.103130755	36.59594926
## X1999	11.8	16.5285714285714	8.440366972	36.82433259
## X2000	12.1	16.5285714285714	9.007352941	37.06096672
## X2001	12.5	18.3	8.839779006	37.35404261
## X2002	12.9	19.9	8.839779006	37.6690133
## X2003	13.3	21.4	8.839779006	38.00421962
## X2004	13.8	22	8.256880734	38.36429243
## X2005	14.2	21.4	8.287292818	38.74816777
## X2006	14.6	19.4	8.256880734	38.24440972
## X2007	15.1	17.2	9.057301294	37.74653637
## X2008	15.6	16.2	9.057301294	37.25552491
## X2009	16	16	10.82568807	36.77094279
## X2010	16.5	15.7	10.82568807	36.29266201
## X2011	17	15.4	11.00917431	35.41761811
## X2012	17.5	14.8	11.00917431	34.55471322
## X2013	18	14.6	11.00917431	33.40639505
## X2014	18.6	14.4	11.41804788	32.28639942
## X2015	19.1	14	11.97053407	31.19373674
## X2016	19.7	13.5	11.97053407	30.13110338
## X2017	11.23333333333333	12.9	11.80811808	29.09824997
## X2018	11.23333333333333	13.1	11.80811808	28.09345334
## X2019	11.23333333333333	14.4	14.39114391	32.24236823
## X2020	11.23333333333333	15.9	14.36464088	31.38875048
## X2021	11.23333333333333	16.6	14.44444444	31.62347309
## X2022	11.23333333333333	16.5285714285714	14.94464945	32.54967472
## X2023	11.23333333333333	16.5285714285714	10.5361899151154	32.68818953
##	X199	X200	X201	X202
## X1960	-0.324850674875	16.8795303592308	42.3025806451613	0.73057999608
## X1961	-0.324850674875	16.8795303592308	42.3025806451613	0.73057999608
## X1962	-0.324850674875	16.8795303592308	42.3025806451613	0.73057999608
## X1963	-0.324850674875	16.8795303592308	42.3025806451613	0.73057999608
## X1964	-0.324850674875	16.8795303592308	42.3025806451613	0.73057999608
## X1965	-0.324850674875	16.8795303592308	42.3025806451613	0.73057999608
## X1966	-0.324850674875	16.8795303592308	42.3025806451613	0.73057999608
## X1967	-0.324850674875	16.8795303592308	42.3025806451613	0.73057999608
## X1968	-0.324850674875	16.8795303592308	42.3025806451613	0.73057999608
## X1969	-0.324850674875	16.8795303592308	42.3025806451613	0.73057999608
## X1970	-0.324850674875	16.8795303592308	42.3025806451613	0.73057999608

## X1971	-0.324850674875	16.8795303592308	42.3025806451613	0.73057999608
## X1972	-0.324850674875	16.8795303592308	42.3025806451613	0.73057999608
## X1973	-0.324850674875	16.8795303592308	42.3025806451613	0.73057999608
## X1974	-0.324850674875	16.8795303592308	42.3025806451613	0.73057999608
## X1975	-0.324850674875	16.8795303592308	42.3025806451613	0.73057999608
## X1976	-0.324850674875	16.8795303592308	42.3025806451613	0.73057999608
## X1977	-0.324850674875	16.8795303592308	42.3025806451613	0.73057999608
## X1978	-0.324850674875	16.8795303592308	42.3025806451613	0.73057999608
## X1979	-0.324850674875	16.8795303592308	42.3025806451613	0.73057999608
## X1980	-0.324850674875	16.8795303592308	42.3025806451613	0.73057999608
## X1981	-0.324850674875	16.8795303592308	42.3025806451613	0.73057999608
## X1982	-0.324850674875	16.8795303592308	42.3025806451613	0.73057999608
## X1983	-0.324850674875	16.8795303592308	42.3025806451613	0.73057999608
## X1984	-0.324850674875	16.8795303592308	42.3025806451613	0.73057999608
## X1985	-0.324850674875	16.8795303592308	42.3025806451613	0.73057999608
## X1986	-0.324850674875	16.8795303592308	42.3025806451613	0.73057999608
## X1987	-0.324850674875	16.8795303592308	42.3025806451613	0.73057999608
## X1988	-0.324850674875	16.8795303592308	42.3025806451613	0.73057999608
## X1989	-0.324850674875	16.8795303592308	42.3025806451613	0.73057999608
## X1990	-0.324850674875	24.48929396	52.95	0.73057999608
## X1991	-0.324850674875	22.80740221	52	0.73057999608
## X1992	-0.324850674875	20.75265214	51.46	0.73057999608
## X1993	-0.324850674875	19.55881334	51.49	0.73057999608
## X1994	-0.324850674875	21.21909967	50.49	0.73057999608
## X1995	-0.324850674875	17.26053911	49.54	0.73057999608
## X1996	-0.553349972	15.76729394	49.13	0.639050007
## X1997	-0.324850674875	16.01513081	47.89	0.686689973
## X1998	-0.443266034	16.70110829	47.95	0.703790009
## X1999	-0.324850674875	15.25807575	47.11	0.724129975
## X2000	-0.159504071	13.59094803	46.88	0.756990016
## X2001	-0.324850674875	13.20704353	47.11	0.735909998
## X2002	-0.381400049	12.05516116	45.75	0.72566998
## X2003	-0.38163045	13.46942476	45.63	0.719290018
## X2004	-0.37812984	14.4825005	44.92	0.756900012
## X2005	-0.291889518	16.61901808	44.16	0.824109972
## X2006	-0.283315152	17.54042472	43.16	0.804729998
## X2007	-0.313716233	17.86408569	41.54	0.805069983
## X2008	-0.413643241	16.50983374	39.38	0.858759999
## X2009	-0.34953326	15.66005525	37.41	0.833140016
## X2010	-0.410472035	16.04374444	36.16	0.788489997
## X2011	-0.363154948	17.31696286	35.01	0.755020022
## X2012	-0.480885625	15.73297336	34.75	0.743990004
## X2013	-0.478094786	17.34931383	34.86	0.706420004
## X2014	-0.475076437	16.25383982	33.85	0.701590002
## X2015	-0.424956709	15.34305035	33.4	0.693099976
## X2016	-0.311531931	16.8795303592308	33.01	0.669839978
## X2017	-0.256514043	16.8795303592308	32.57	0.66602999
## X2018	-0.225996733	16.8795303592308	32.73	0.66000998
## X2019	-0.150565445	16.8795303592308	33.27	0.659420013
## X2020	-0.128488675	16.8795303592308	35.82	0.64635998

## X2021	-0.090854593	16.8795303592308	42.3025806451613	0.73057999608	
## X2022	-0.050446417	16.8795303592308	42.3025806451613	0.73057999608	
## X2023	-0.324850674875	16.8795303592308	42.3025806451613	0.73057999608	
##	X203	X204	X205	X206	
## X1960	0.0459352078333333	92.3771203229787	0.805776106146341	61038.0192	
## X1961	0.0459352078333333	92.3771203229787	0.805776106146341	61038.0192	
## X1962	0.0459352078333333	92.3771203229787	0.805776106146341	61038.0192	
## X1963	0.0459352078333333	92.3771203229787	0.805776106146341	61038.0192	
## X1964	0.0459352078333333	92.3771203229787	0.805776106146341	61038.0192	
## X1965	0.0459352078333333	92.3771203229787	0.805776106146341	61038.0192	
## X1966	0.0459352078333333	92.3771203229787	0.805776106146341	61038.0192	
## X1967	0.0459352078333333	92.3771203229787	0.805776106146341	61038.0192	
## X1968	0.0459352078333333	92.3771203229787	0.805776106146341	61038.0192	
## X1969	0.0459352078333333	92.3771203229787	0.805776106146341	61038.0192	
## X1970	0.0459352078333333	92.3771203229787	0.805776106146341	61038.0192	
## X1971	0.0459352078333333	77.41378784	0.578909993	61038.0192	
## X1972	0.0459352078333333	78.40390778	0.582499981	61038.0192	
## X1973	0.0459352078333333	81.73573303	0.592090011	61038.0192	
## X1974	0.0459352078333333	81.21514893	0.805776106146341	61038.0192	
## X1975	0.0459352078333333	81.904953	0.599870026	61038.0192	
## X1976	0.0459352078333333	81.42256927	0.603519976	61038.0192	
## X1977	0.0459352078333333	83.98291016	0.607659996	61038.0192	
## X1978	0.0459352078333333	80.22691345	0.600009978	61038.0192	
## X1979	0.0459352078333333	80.0406723	0.805776106146341	61038.0192	
## X1980	0.0459352078333333	81.32977295	0.610979974	61038.0192	
## X1981	0.0459352078333333	82.58339691	0.618969977	61038.0192	
## X1982	0.0459352078333333	83.41538239	0.61589998	61038.0192	
## X1983	0.0459352078333333	85.47731018	0.640160024	61038.0192	
## X1984	0.0459352078333333	87.32562256	0.627759993	61038.0192	
## X1985	0.0459352078333333	87.41472626	0.805776106146341	61038.0192	
## X1986	0.0459352078333333	89.60289764	0.657949984	61038.0192	
## X1987	0.0459352078333333	87.54055023	0.668169975	61038.0192	
## X1988	0.0459352078333333	89.0692215	0.677860022	61038.0192	
## X1989	0.0459352078333333	92.2303009	0.67543	61038.0192	
## X1990	0.0459352078333333	91.64842987	0.805776106146341	61038.0192	
## X1991	0.0459352078333333	91.30232239	0.805776106146341	61038.0192	
## X1992	0.0459352078333333	91.79192352	0.805776106146341	61038.0192	
## X1993	0.0459352078333333	93.39665222	0.740249991	61038.0192	
## X1994	0.0459352078333333	94.3418808	0.753220022	61038.0192	
## X1995	0.0459352078333333	93.6837616	0.754369974	61038.0192	
## X1996	0.313456208	93.17089844	0.762629986	18904.78	
## X1997	0.0459352078333333	92.8254776	0.775860012	19348.5	
## X1998	0.335014313	91.30761719	0.805776106146341	19717.89	
## X1999	0.0459352078333333	91.82457733	0.79697001	20837.67	
## X2000	0.348079592	93.32395172	0.802240014	21408.98	
## X2001	0.0459352078333333	92.7808609	0.809880018	22532.95	
## X2002	-0.017395871	93.08487701	0.830370009	24313.44	
## X2003	0.120161645	100.7741394	0.915700018	26819.84	
## X2004	0.053356059	92.3771203229787	0.805776106146341	28779.55	
## X2005	0.133130163	92.3771203229787	0.805776106146341	32885.07	

## X2006	0.178989619	92.3771203229787	0.805776106146341	38130.93
## X2007	0.096898161	107.9235687	0.942560017	42576.2
## X2008	0.09585046	108.3117065	0.967050016	48135.46
## X2009	0.017980825	106.9168015	0.989970028	53556.94
## X2010	-0.035810821	106.5515137	0.989049971	60555.03
## X2011	-0.08629714	103.9550171	0.998529971	71809.31
## X2012	-0.062880747	107.7708817	1.003399968	77746.24
## X2013	-0.045691311	102.5175705	1.035693049	82779.36
## X2014	-0.068644837	92.3771203229787	1.032517552	91336.65
## X2015	-0.069937095	100.7127686	1.03027153	97787.68
## X2016	-0.055489417	100.2540359	1.030451775	107193.04
## X2017	-0.029448533	92.3771203229787	1.084020019	112504.97
## X2018	-0.000957083	97.59329987	1.015334487	127527.46
## X2019	-0.06662368	96.11712646	1.019774318	129549.92
## X2020	-0.057718564	97.9693222	1.007327437	149212.62
## X2021	-0.108277	99.39272308	0.99164027	61038.0192
## X2022	0.114700042	108.1451721	0.805776106146341	61038.0192
## X2023	0.0459352078333333	92.3771203229787	0.805776106146341	61038.0192
##	X207	X210	X211	X213
## X1960	-0.862968022	100182.8	7.8180303030303	0.375242039333333
## X1961	1.708744687	100182.8	7.8180303030303	0.375242039333333
## X1962	0.563128596	100182.8	7.8180303030303	0.375242039333333
## X1963	0.275446844	100182.8	7.8180303030303	0.375242039333333
## X1964	0.608502139	100182.8	7.8180303030303	0.375242039333333
## X1965	-1.641714189	100182.8	7.8180303030303	0.375242039333333
## X1966	-1.168014637	100182.8	7.8180303030303	0.375242039333333
## X1967	-0.170082286	100182.8	7.8180303030303	0.375242039333333
## X1968	-1.172666695	100182.8	7.8180303030303	0.375242039333333
## X1969	-0.613689554	100182.8	7.8180303030303	0.375242039333333
## X1970	1.420618382	100182.8	7.8180303030303	0.375242039333333
## X1971	0.521909626	100182.8	7.8180303030303	0.375242039333333
## X1972	-2.31230517	100182.8	7.8180303030303	0.375242039333333
## X1973	0.950475531	100182.8	7.8180303030303	0.375242039333333
## X1974	-1.090182836	100182.8	7.8180303030303	0.375242039333333
## X1975	1.608301585	100182.8	7.8180303030303	0.375242039333333
## X1976	-0.207561642	100182.8	7.8180303030303	0.375242039333333
## X1977	1.05615331	100182.8	7.8180303030303	0.375242039333333
## X1978	1.099265092	100182.8	7.8180303030303	0.375242039333333
## X1979	-0.868649421	100182.8	7.8180303030303	0.375242039333333
## X1980	-0.48616402	100182.8	7.8180303030303	0.375242039333333
## X1981	0.584972296	100182.8	7.8180303030303	0.375242039333333
## X1982	-1.103317797	100182.8	7.8180303030303	0.375242039333333
## X1983	1.330577245	100182.8	7.8180303030303	0.375242039333333
## X1984	-0.656763654	100182.8	7.8180303030303	0.375242039333333
## X1985	-0.546134341	100182.8	7.8180303030303	0.375242039333333
## X1986	-0.967502343	100182.8	7.8180303030303	0.375242039333333
## X1987	-1.578824523	100182.8	7.8180303030303	0.375242039333333
## X1988	1.231755946	100182.8	7.8180303030303	0.375242039333333
## X1989	-1.020178776	100182.8	7.8180303030303	0.375242039333333
## X1990	1.461819478	100182.8	7.8180303030303	0.375242039333333

```
## X1991      -0.870448864 100182.8      6.737 0.3752420393333333
## X1992      -1.497113446 100182.8      6.815 0.3752420393333333
## X1993       -0.59358969 100182.8      6.798 0.3752420393333333
## X1994       0.383761775 100182.8      6.83 0.3752420393333333
## X1995       0.261733422 100182.8      7.014 0.3752420393333333
## X1996      -0.159242874 100182.8      7.181      0.476563722
## X1997       0.04946607 100182.8      7.279 0.3752420393333333
## X1998       0.557456966 100182.8      7.487      0.391242564
## X1999      -0.712996864 100182.8      7.709 0.3752420393333333
## X2000      -0.879293038 100182.8      7.77      0.352063388
## X2001      -1.025149912 100182.8      7.957 0.3752420393333333
## X2002      -2.075233011      53005      8.102      0.426245898
## X2003      -0.774315882      47751      8.36      0.454564899
## X2004      -1.164392132      74129      8.531      0.399967372
## X2005      -0.197014941      62505      8.7      0.41368565
## X2006       0.537322349      67411      8.625      0.437193722
## X2007      -0.114925517      73907      8.536      0.453963935
## X2008       0.382488444      85953      8.354      0.462193102
## X2009      -1.651050372      79203      8.384      0.46074909
## X2010       1.106199121      51317      8.319      0.443312973
## X2011       0.133884987      88460      8.168      0.435818583
## X2012      -0.656339955      95069      8.095      0.399454206
## X2013       1.409963432      80866      8.037      0.432780147
## X2014      -0.741910185      139138      7.981      0.41331318
## X2015      -0.139608484      116308      7.915      0.427884758
## X2016      -0.287425087      175362      7.842      0.440999389
## X2017       0.175999643      189421      7.733      0.387068421
## X2018      -1.168407401      132233      7.65      0.360433936
## X2019       1.754936904      121154      6.51      0.268094271
## X2020       1.073866892      137716     10.195      0.126321062
## X2021       0.79531536      132748      7.713      0.090988867
## X2022     -0.131146958693548 100182.8      7.33      0.050905809
## X2023     -0.131146958693548 100182.8      7.338 0.3752420393333333
```

#insert column names for Sri_Lanka data frame

```
colNumSL<- vector()
colNumSL<-dfSL$Indicator.Code
colnames(Sri_Lanka)<-colNumSL
```

#insert column names for Bangladesh data frame

```
colNumBA<- vector()
colNumBA<-dfBA$Indicator.Code
colnames(Bangladesh)<-colNumBA
```

#insert column names for India data frame

```
colNumIN<- vector()
colNumIN<-dfIN$Indicator.Code
colnames(India)<-colNumIN
```

```
#insert row names for 3 country
```

```
year<-c(1960:2023)
```

```
Sri_Lanka$Year<-year
```

```
Bangladesh$Year<- year
```

```
India$Year<-year
```

```
#convert all values for numeric
```

```
Sri_Lanka[]<-lapply(Sri_Lanka,as.numeric)
```

```
Bangladesh[]<-lapply(Bangladesh,as.numeric)
```

```
India[]<-lapply(India,as.numeric)
```

```
#summary for ER.H2O.FWTL.ZS
```

```
summary(Sri_Lanka$ER.H2O.FWTL.ZS)
```

```
##      Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##  18.50   23.48   23.48   23.48   24.52   24.64
```

```
summary(India$ER.H2O.FWTL.ZS)
```

```
##      Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##  26.28   35.15   38.75   38.75   43.82   45.34
```

```
#summary for EN.ATM.CO2E.PC
```

```
summary(Sri_Lanka$EN.ATM.CO2E.PC)
```

```
##      Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##  0.2232  0.6322  0.6352  0.6352  0.6352  1.0813
```

```
summary(Bangladesh$EN.ATM.CO2E.PC)
```

```
##      Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
## 0.09914 0.24683 0.28097 0.28097 0.28097 0.58616
```

```
summary(India$EN.ATM.CO2E.PC)
```

```
##      Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##  0.6475  1.0235  1.1335  1.1335  1.1335  1.7956
```

```
#The average CO2 emission of Srilanka is 0.6352 metric ton per capita,The
average CO2 emission of Bangladesh is 0.28097 metric ton per capita,The
average CO2 emission of India is 1.1335 metric ton per capita
```

```
#summary for CC.ES
```

```
summary(Sri_Lanka$CC.ES)
```

```
##      Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
## -0.48946 -0.28525 -0.28525 -0.28525 -0.28525 -0.05654
```

```
summary(Bangladesh$CC.ES)
```

```
##      Min. 1st Qu.  Median      Mean 3rd Qu.      Max.
## -1.597  -1.082  -1.082  -1.082  -1.075  -0.773
```

```
summary(India$CC.EST)
```

```
##      Min. 1st Qu.  Median      Mean 3rd Qu.      Max.
## -0.5554 -0.3884 -0.3884 -0.3884 -0.3884 -0.2294
```

```
#create vectors for EN.ATM.CO2E.PC
```

```
SL<-c(Sri_Lanka$EN.ATM.CO2E.PC)
```

```
IN<-c(India$EN.ATM.CO2E.PC)
```

```
BA<-c(Bangladesh$EN.ATM.CO2E.PC)
```

```
data_1<-data.frame(SL,IN,BA,year)
```

```
data_1
```

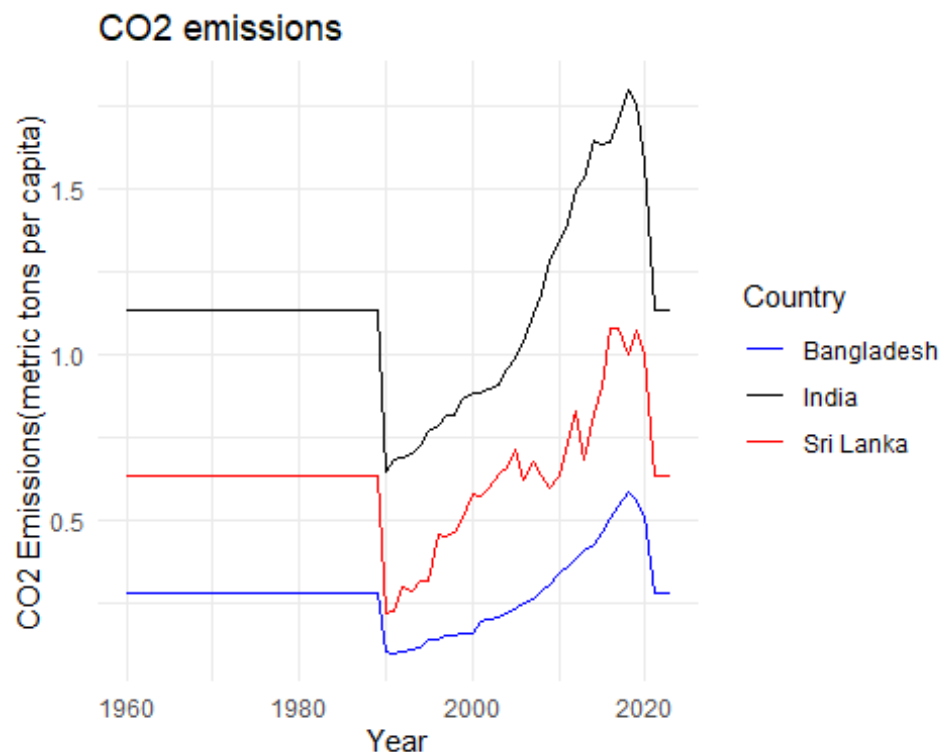
```
##           SL           IN           BA year
## 1  0.6352256  1.1334962  0.28097285 1960
## 2  0.6352256  1.1334962  0.28097285 1961
## 3  0.6352256  1.1334962  0.28097285 1962
## 4  0.6352256  1.1334962  0.28097285 1963
## 5  0.6352256  1.1334962  0.28097285 1964
## 6  0.6352256  1.1334962  0.28097285 1965
## 7  0.6352256  1.1334962  0.28097285 1966
## 8  0.6352256  1.1334962  0.28097285 1967
## 9  0.6352256  1.1334962  0.28097285 1968
## 10 0.6352256  1.1334962  0.28097285 1969
## 11 0.6352256  1.1334962  0.28097285 1970
## 12 0.6352256  1.1334962  0.28097285 1971
## 13 0.6352256  1.1334962  0.28097285 1972
## 14 0.6352256  1.1334962  0.28097285 1973
## 15 0.6352256  1.1334962  0.28097285 1974
## 16 0.6352256  1.1334962  0.28097285 1975
## 17 0.6352256  1.1334962  0.28097285 1976
## 18 0.6352256  1.1334962  0.28097285 1977
## 19 0.6352256  1.1334962  0.28097285 1978
## 20 0.6352256  1.1334962  0.28097285 1979
## 21 0.6352256  1.1334962  0.28097285 1980
## 22 0.6352256  1.1334962  0.28097285 1981
## 23 0.6352256  1.1334962  0.28097285 1982
## 24 0.6352256  1.1334962  0.28097285 1983
## 25 0.6352256  1.1334962  0.28097285 1984
## 26 0.6352256  1.1334962  0.28097285 1985
## 27 0.6352256  1.1334962  0.28097285 1986
## 28 0.6352256  1.1334962  0.28097285 1987
## 29 0.6352256  1.1334962  0.28097285 1988
## 30 0.6352256  1.1334962  0.28097285 1989
## 31 0.2231562  0.6474513  0.10755000 1990
## 32 0.2288277  0.6830864  0.09914389 1991
## 33 0.2977851  0.6900740  0.10625736 1992
## 34 0.2856171  0.7031362  0.11081412 1993
```

```
## 35 0.3201689 0.7256221 0.11714278 1994
## 36 0.3199767 0.7651896 0.14053834 1995
## 37 0.4560129 0.7872318 0.14035485 1996
## 38 0.4520811 0.8173601 0.15544920 1997
## 39 0.4637947 0.8187210 0.15480038 1998
## 40 0.5086283 0.8662423 0.15861724 1999
## 41 0.5820560 0.8850779 0.16012205 2000
## 42 0.5733532 0.8837470 0.19468676 2001
## 43 0.5957498 0.8972426 0.20340119 2002
## 44 0.6430184 0.9054566 0.20973720 2003
## 45 0.6602317 0.9554702 0.21995504 2004
## 46 0.7108110 0.9842615 0.23213540 2005
## 47 0.6242808 1.0365339 0.25172190 2006
## 48 0.6769179 1.1235995 0.26358659 2007
## 49 0.6315156 1.1803612 0.28593332 2008
## 50 0.6000934 1.2788736 0.30503015 2009
## 51 0.6324486 1.3380338 0.34023325 2010
## 52 0.7387531 1.3968785 0.36155740 2011
## 53 0.8298177 1.4982041 0.38782923 2012
## 54 0.6837293 1.5276744 0.40878818 2013
## 55 0.8219749 1.6424653 0.42518946 2014
## 56 0.9017750 1.6313235 0.46351708 2015
## 57 1.0813100 1.6399140 0.50773927 2016
## 58 1.0759614 1.7049267 0.54178783 2017
## 59 1.0009368 1.7955953 0.58615763 2018
## 60 1.0745264 1.7525344 0.55973366 2019
## 61 0.9966832 1.5760932 0.51064756 2020
## 62 0.6352256 1.1334962 0.28097285 2021
## 63 0.6352256 1.1334962 0.28097285 2022
## 64 0.6352256 1.1334962 0.28097285 2023
```

```
library(ggplot2)
```

```
## Warning: package 'ggplot2' was built under R version 4.3.3
```

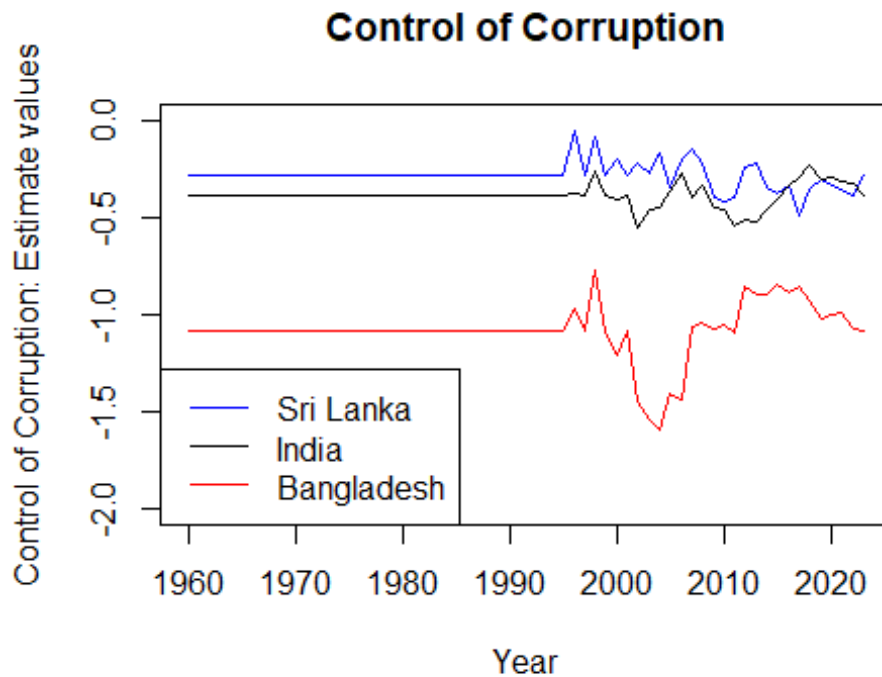
```
ggplot(data = data_1, mapping = aes (x=year))+
  geom_line (mapping = aes(y=SL, color = "Sri Lanka"))+
  geom_line (mapping =aes(y=IN, color = "India"))+
  geom_line (mapping =aes(y=BA, color = "Banglasdesh"))+
  labs (title = "CO2 emissions", x="Year", y="CO2 Emissions(metric tons per
capita))+
  scale_color_manual(name="Country", labels = c("Bangladesh", "India", "Sri
Lanka"), values = c("blue", "black", "red"))+
  theme_minimal()
```



***INTERPRETATION-This diagram shows CO2 emissions per capita in India, Sri Lanka and Bangladesh. The x-axis shows the year, ranging from 1960 to 2020. The y-axis shows the metric tons of CO2 emissions per capita. The Black line show India, Blue line shows Bangladesh and red line shows Sri Lanka. Bangladesh has the lowest percentage of CO2 emissions of the three countries. India has the highest percentage of CO2 emissions. Sri Lanka has a higher percentage of CO2 emissions than Bangladesh.

#create graph for CC. EST

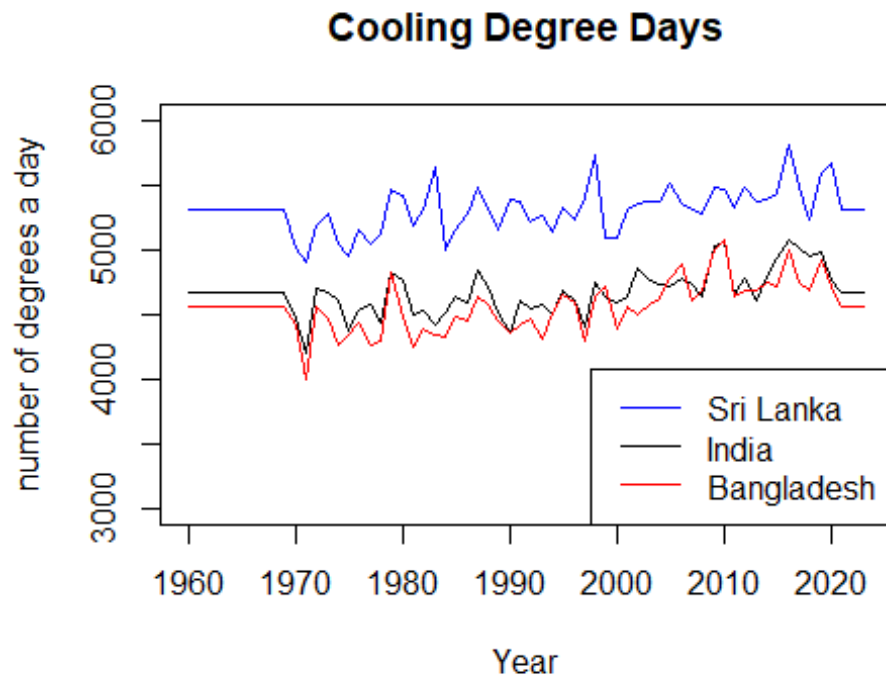
```
plot(year,Sri_Lanka$CC. EST,ylim=c(-2,0),type="l",col="blue",xlab="Year",ylab="Control of Corruption: Estimate values",main="Control of Corruption")
lines(year,India$CC. EST,col="black")
lines(year,Bangladesh$CC. EST,col="red")
legend("bottomleft", legend = c("Sri Lanka", "India","Bangladesh"), col = c("blue","black","red"), lty = 1, bty = "o")
```



***INTERPRETATION-This diagram shows Control of Corruption in India, Sri Lanka and Bangladesh. The x-axis shows the year, ranging from 1960 to 2020. The y-axis shows the Control of Corruption Estimate Values. The Black line show India, Blue line shows Sri Lanka and Red line shows Bangladesh. Bangladesh has lowest Control of Corruption of the three countries. India has the highest Control of Corruption than Bangladesh.

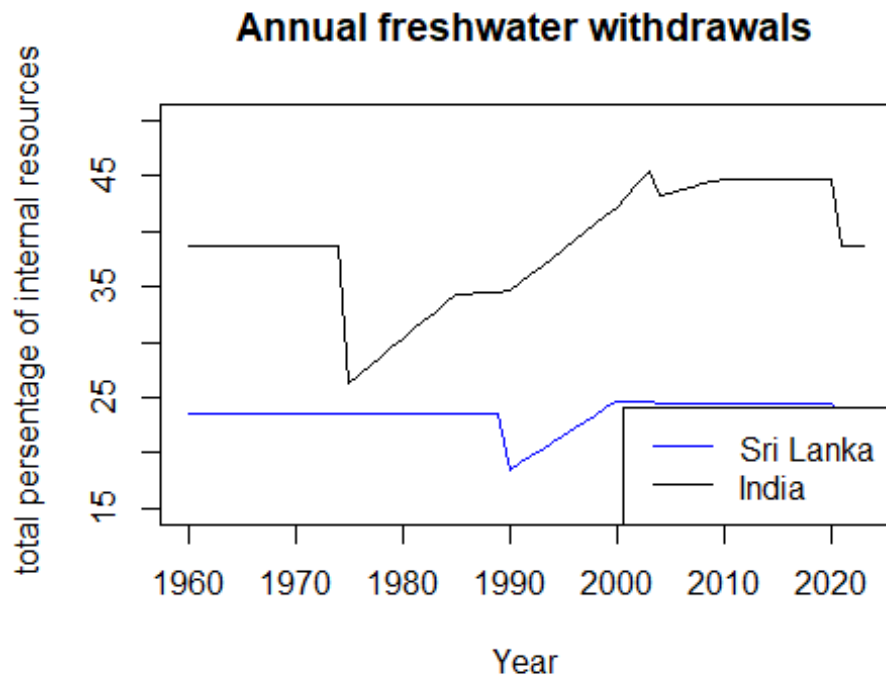
#create graph for EN.CLC.CDDY.XD

```
plot(year,Sri_Lanka$EN.CLC.CDDY.XD,ylim=c(3000,6000),type="l",col="blue",xlab="Year",ylab="number of degrees a day",main="Cooling Degree Days")
lines(year,India$EN.CLC.CDDY.XD,col="black")
lines(year,Bangladesh$EN.CLC.CDDY.XD,col="red")
legend("bottomright", legend = c("Sri Lanka", "India", "Bangladesh"), col = c("blue", "black", "red"), lty = 1, bty = "o")
```



***INTERPRETATION-This diagram shows Cooling Degree Days in India, Sri Lanka and Bangladesh. The x-axis shows the year, ranging from 1960 to 2020. The y-axis shows the Number of degrees a day. The Black line shows India, Blue line shows Sri Lanka and Red line shows Bangladesh. Sri Lanka has the highest number of degrees a day of the three countries. India and Bangladesh like varies equally

```
#create graph for ER.H2O.FWTL.ZS
plot(year,Sri_Lanka$ER.H2O.FWTL.ZS,ylim=c(15,50),type=
"l",col="blue",xlab="Year",ylab=" total percentage of internal
resources",main="Annual freshwater withdrawals")
lines(year,India$ER.H2O.FWTL.ZS,col="black")
legend("bottomright", legend = c("Sri Lanka", "India"), col =
c("blue","black"), lty = 1, bty = "o")
```

***INTERPRETATION-This diagram shows Annual freshwater withdrawals India and Sri Lanka. The x-axis shows the year, ranging from 1960 to 2020. The y-axis shows the total percentage of internal resources. The Black line shows India and Blue line shows Sri Lanka. India has Highest total percentage of internal resources. Sri Lanka has lowest total percentage of internal resources.