sandeephdi

Introduction

This package has been created to load the data from the Human Development Index (HDI) dataset of any country.

Loading the package

```
library(sandeephdi)
```

Loading the data

```
# we will load india and pakistan data
#df <- read_hdro_file("D:/1 UCD/3rd Semester/Advance Prog R/Assignment 1/hdro_indicators_pak.csv")
path1<-"D:/1 UCD/3rd Semester/Advance Prog R/Assignment 1/hdro_indicators_pak.csv"
path2<-"D:/1 UCD/3rd Semester/Advance Prog R/Assignment 1/hdro_indicators_ind.csv"
df_ind <- read_hdro_file(path2)
df pak <- read hdro file(path1)</pre>
```

Printing the data

```
# first we will print the data of india
head(df_ind)
#> # A tibble: 6 × 8
    country_code country_name indicator_id indicator_name
                                                                  index_id index_name
     <fct>
                  <fct>
                                <fct>
                                              <fct>
                                                                   <fct>
                                                                            <fct>
#> 1 IND
                  India
                                abr
                                              Adolescent Birth R... GII
                                                                            Gender In...
#> 2 IND
                  India
                                             Adolescent Birth R... GII
                                                                            Gender In...
                                abr
#> 3 IND
                  India
                                              Adolescent Birth R... GII
                                                                            Gender In...
                                abr
#> 4 IND
                  India
                                              Adolescent Birth R... GII
                                                                            Gender In...
                                abr
#> 5 IND
                  India
                                abr
                                              Adolescent Birth R... GII
                                                                            Gender In...
#> 6 IND
                  India
                                abr
                                              Adolescent Birth R... GII
                                                                            Gender In...
#> # i 2 more variables: value <dbl>, year <date>
cat("\n")
# now we will use the print
print(df_ind)
#> # A tibble: 905 × 8
      country_code country_name indicator_id indicator_name
                                                                   index_id index_name
                                                                            <fct>
#>
      <fct>
                   <fct>
                                 <fct>
                                               <fct>
                                                                   <fct>
  1 IND
                   India
                                               Adolescent Birth ... GII
                                                                            Gender In...
```

```
Adolescent Birth ... GII
                                                                                Gender In...
#>
    2 IND
                     India
                                   abr
                                                 Adolescent Birth ... GII
    3 IND
                     India
                                   abr
                                                                                Gender In...
                                                 Adolescent Birth ... GII
#>
    4 IND
                     India
                                   abr
                                                                                Gender In...
                                                 Adolescent Birth ... GII
    5 IND
                     India
                                                                                Gender In...
#>
                                   abr
    6 IND
                     India
                                                 Adolescent Birth ... GII
                                                                                Gender In...
                                   abr
                                                 Adolescent Birth ... GII
    7 IND
                     India
                                   abr
                                                                                Gender In...
                                                 Adolescent Birth ... GII
    8 IND
                     India
                                   abr
                                                                                Gender In...
    9 IND
                     India
                                   abr
                                                 Adolescent Birth ... GII
                                                                                Gender In...
#> 10 IND
                     India
                                                 Adolescent Birth ... GII
                                                                                Gender In...
                                   ahr
#> # i 895 more rows
#> # i 2 more variables: value <dbl>, year <date>
# similarly printing the data of pakistan
head(df_pak)
#> # A tibble: 6 × 8
     country_code country_name indicator_id indicator_name
                                                                      index_id index_name
#>
     <fct>
                   <fct>
                                  <fct>
                                                <fct>
                                                                      <fct>
                                                                                <fct>
#> 1 PAK
                   Pakistan
                                  abr
                                                Adolescent Birth R... GII
                                                                                Gender In...
#> 2 PAK
                                                Adolescent Birth R... GII
                   Pakistan
                                  abr
                                                                                Gender In...
                                                Adolescent Birth R... GII
#> 3 PAK
                   Pakistan
                                  abr
                                                                                Gender In...
#> 4 PAK
                   Pakistan
                                  abr
                                                Adolescent Birth R... GII
                                                                                Gender In...
#> 5 PAK
                   Pakistan
                                  abr
                                                Adolescent Birth R... GII
                                                                                Gender In...
#> 6 PAK
                   Pakistan
                                  abr
                                                Adolescent Birth R... GII
                                                                                Gender In...
#> # i 2 more variables: value <dbl>, year <date>
cat("\n")
print(df_pak)
#> # A tibble: 905 × 8
      country_code country_name indicator_id indicator_name
                                                                      index_id index_name
      <fct>
                     <fct>
                                   <fct>
                                                 <fct>
                                                                      <fct>
                                                                                <fct>
#>
#>
    1 PAK
                     Pakistan
                                   abr
                                                 Adolescent Birth ... GII
                                                                                Gender In...
    2 PAK
                     Pakistan
                                                 Adolescent Birth ... GII
                                                                                Gender In...
                                   abr
    3 PAK
                    Pakistan
                                   abr
                                                 Adolescent Birth ... GII
                                                                                Gender In...
#>
                                                 Adolescent Birth ... GII
    4 PAK
                    Pakistan
                                   abr
                                                                                Gender In...
                                                 Adolescent Birth ... GII
#>
    5 PAK
                    Pakistan
                                   abr
                                                                                Gender In...
    6 PAK
                    Pakistan
                                   abr
                                                 Adolescent Birth ... GII
                                                                                Gender In...
#>
    7 PAK
                    Pakistan
                                   abr
                                                 Adolescent Birth ... GII
                                                                                Gender In...
    8 PAK
                                                 Adolescent Birth ... GII
                                                                                Gender In...
#>
                    Pakistan
                                   abr
                                                 Adolescent Birth ... GII
    9 PAK
                    Pakistan
                                                                                Gender In...
                                   ahr
                                                 Adolescent Birth ... GII
#> 10 PAK
                     Pakistan
                                   abr
                                                                                Gender In...
#> # i 895 more rows
#> # i 2 more variables: value <dbl>, year <date>
```

Summary of the data

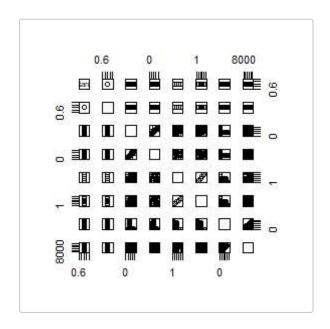
```
# summary of the data of india
cat("Summary of India using summary function\n")
#> Summary of India using summary function
summary(df_ind)
```

```
#>
    country_code country_name
                                      indicator_id
                                             : 33
    IND:905
                 India:905
#>
                               abr
#>
                               co2_prod
                                             : 33
#>
                               diff_hdi_phdi: 33
                               eys
                                             : 33
#>
#>
                               eys_f
                                             : 33
                                             : 33
#>
                               eys_m
#>
                               (Other)
                                             :707
                                                        indicator_name index_id
#>
    Adolescent Birth Rate (births per 1,000 women ages 15-19): 33
#>
                                                                        GDI :331
    Carbon dioxide emissions per capita (production) (tonnes): 33
#>
                                                                        GII :265
    Difference from HDI value (%)
                                                                : 33
                                                                        HDI :133
#>
    Expected Years of Schooling (years)
                                                                : 33
                                                                        IHDI: 65
#>
    Expected Years of Schooling, female (years)
                                                                        MPI : 11
#>
                                                                : 33
    Expected Years of Schooling, male (years)
                                                                : 33
                                                                        PHDI:100
#>
    (Other)
#>
                                                                :707
#>
                                                     index name
                                                                      value
#>
    Gender Development Index
                                                          :331
                                                                 Min.
                                                                              0.069
    Gender Inequality Index
#>
                                                          :265
                                                                 1st Qu.:
                                                                              5.000
  Human Development Index
                                                          :133
                                                                 Median :
                                                                             24.777
#>
   Inequality-adjusted Human Development Index
                                                          : 65
                                                                 Mean
                                                                            441.766
  Multidimensional Poverty Index
                                                                             70.117
#>
                                                          : 11
                                                                 3rd Qu.:
    Planetary pressures-adjusted Human Development Index:100
#>
                                                                 Max.
                                                                         :10696.448
#>
#>
         year
           :1990-01-01
#>
    Min.
#>
   1st Qu.:1998-01-01
    Median :2007-01-01
#>
   Mean
           :2006-10-19
   3rd Qu.:2015-01-01
#>
   Max.
           :2022-01-01
#>
    NA's
           :11
cat("\n")
# summary of the data of pakistan
cat("Summary of Pakistan using summary function\n")
#> Summary of Pakistan using summary function
summary(df pak)
                                         indicator_id
    country_code
                    country_name
#>
    PAK:905
                 Pakistan:905
                                               : 33
#>
                                 abr
                                 co2 prod
                                               : 33
#>
#>
                                 diff_hdi_phdi: 33
                                               : 33
#>
                                 eys
#>
                                 eys f
                                               : 33
                                               : 33
#>
                                 eys_m
#>
                                 (Other)
                                               :707
#>
                                                        indicator name index id
    Adolescent Birth Rate (births per 1,000 women ages 15-19): 33
                                                                        GDI :331
#>
    Carbon dioxide emissions per capita (production) (tonnes): 33
#>
                                                                        GII :265
  Difference from HDI value (%)
                                                                : 33
                                                                        HDI :133
#>
  Expected Years of Schooling (years)
                                                                : 33
                                                                        IHDI: 65
    Expected Years of Schooling, female (years)
                                                                        MPI : 11
                                                                : 33
```

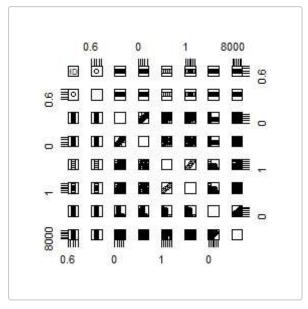
```
Expected Years of Schooling, male (years)
                                                                      PHDI:100
                                                              : 33
    (Other)
                                                              :707
#>
#>
                                                    index_name
                                                                    value
#>
   Gender Development Index
                                                         :331
                                                                Min.
                                                                       :
                                                                           0.192
   Gender Inequality Index
                                                         :265
                                                                1st Qu.:
                                                                           3.773
#>
   Human Development Index
                                                                Median : 21.041
#>
                                                         :133
   Inequality-adjusted Human Development Index
                                                         : 65
                                                                      : 452.831
#>
                                                                Mean
   Multidimensional Poverty Index
                                                         : 11
                                                                3rd Qu.: 66.889
   Planetary pressures-adjusted Human Development Index:100
                                                                       :8571.083
#>
                                                                Max.
#>
#>
        year
   Min.
           :1990-01-01
   1st Qu.:1998-01-01
   Median :2007-01-01
           :2006-10-19
   Mean
   3rd Qu.:2015-01-01
#>
  Max.
           :2022-01-01
   NA's
           :11
```

Plotting the data

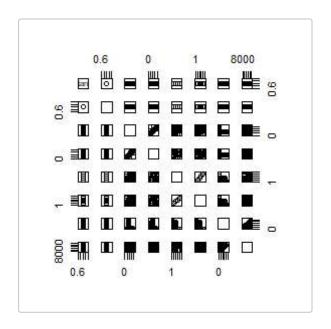
```
# plotting the data of india
cat("Plotting the data of India\n")
#> Plotting the data of India
plot(df_ind, "Life Expectancy at Birth")
```



```
plot(df_ind, "HDI")
```



plotting the data of pakistan
cat("Plotting the data of Pakistan\n")
#> Plotting the data of Pakistan
plot(df_ind, "Life Expectancy at Birth")



plot(df_ind, "HDI")

