```
#1
library(tidyverse)
library(readxl)
library(purrr)
library(dplyr)
f=file.choose()
GDP=read_excel(f)
f=file.choose()
Fertility=read_excel(f)
f=file.choose()
Life_Expectancy=read_excel(f)
f=file.choose()
Children_Mortality=read_excel(f)
f=file.choose()
Population=read_excel(f)

#2
myfunc=function(df) {
    return(colnames(df))
}
myfunc(GDP)
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> myfunc(Fertility)
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> myfunc(Life_Expectancy)
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> myfunc(Population)
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list(GDP = GDP, Fertility = Fertility, Life_Expectancy = Life_Expectancy, Children_Mortality =
Children_Mortality, Population = Population) %>%
  purrr::imap(~ dplyr::rename(., Country = 1)) %>%
  list2env(envir = .GlobalEnv)

Dataframes=list(GDP,Fertility,Life_Expectancy,Children_Mortality,Population)

#3

GDP2 <- GDP %>%
  pivot_longer("1960":"2011.0", names_to = "Year", values_to = "GDP") %>%
  arrange(Country, Year)

Fertility2 <- Fertility %>%
  pivot_longer("1545.0":"2099.0", names_to = "Year", values_to = "Fertility") %>%
  arrange(Country, Year)

Life_Expectancy2 <- Life_Expectancy %>%
  pivot_longer("1765.0":"2099.0", names_to = "Year", values_to = "Life_Expectancy") %>%
  arrange(Country, Year)

Children_Mortality2 <- Children_Mortality %>%
  pivot_longer("1800.0":"2015.0", names_to = "Year", values_to = "Children_Mortality") %>%
  arrange(Country, Year)

Population2 <- Population %>%
  pivot_longer("1800.0":"2015.0", names_to = "Year", values_to = "Population") %>%
  arrange(Country, Year)

Full_Table = GDP2 %>% full_join(Fertility2) %>% full_join(Life_Expectancy2) %>%
full_join(Children_Mortality2) %>% full_join(Population2)
Full_Table
# A tibble: 80,521 × 7
   Country  Year     GDP Fertility Life_Expectancy Children_M…¹ Popul…²
   <chr>    <chr>  <dbl>     <dbl>          <dbl>        <dbl>   <dbl>
 1 Abkhazia 1960      NA        NA             NA           NA      NA
 2 Abkhazia 1961.0    NA        NA             NA           NA      NA
 3 Abkhazia 1962.0    NA        NA             NA           NA      NA
 4 Abkhazia 1963.0    NA        NA             NA           NA      NA
 5 Abkhazia 1964.0    NA        NA             NA           NA      NA
 6 Abkhazia 1965.0    NA        NA             NA           NA      NA
 7 Abkhazia 1966.0    NA        NA             NA           NA      NA
 8 Abkhazia 1967.0    NA        NA             NA           NA      NA
 9 Abkhazia 1968.0    NA        NA             NA           NA      NA
```
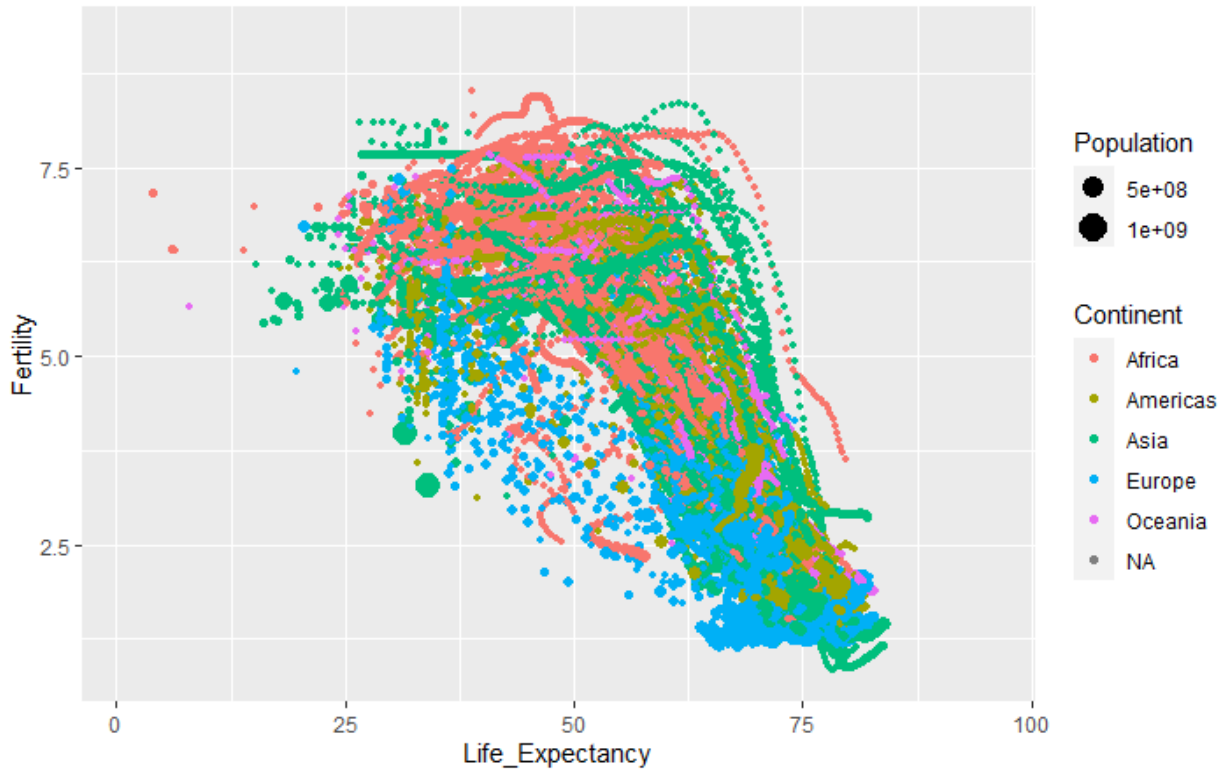

```
10 Abkhazia 1969.0    NA        NA              NA           NA      NA
# … with 80,511 more rows, and abbreviated variable names
#   ¹Children_Mortality, ²Population
# i Use `print(n = ...)` to see more rows


#4
f=file.choose()
Continents=read_tsv(f,col_names = c("Country","Continent"))

Data=Full_Table %>% left_join(Continents)

Data
# A tibble: 80,802 × 8
   Country  Year     GDP Fertility Life_Expec…¹ Child…² Popul…³ Conti…⁴
   <chr>    <chr>  <dbl>     <dbl>        <dbl>   <dbl>   <dbl> <chr>
 1 Abkhazia 1960      NA        NA           NA      NA      NA NA
 2 Abkhazia 1961.0    NA        NA           NA      NA      NA NA
 3 Abkhazia 1962.0    NA        NA           NA      NA      NA NA
 4 Abkhazia 1963.0    NA        NA           NA      NA      NA NA
 5 Abkhazia 1964.0    NA        NA           NA      NA      NA NA
 6 Abkhazia 1965.0    NA        NA           NA      NA      NA NA
 7 Abkhazia 1966.0    NA        NA           NA      NA      NA NA
 8 Abkhazia 1967.0    NA        NA           NA      NA      NA NA
 9 Abkhazia 1968.0    NA        NA           NA      NA      NA NA
10 Abkhazia 1969.0    NA        NA           NA      NA      NA NA
# … with 80,792 more rows, and abbreviated variable names
#   ¹Life_Expectancy, ²Children_Mortality, ³Population, ⁴Continent
# i Use `print(n = ...)` to see more rows


#5


#6
Data2 = Data %>% group_by(Data, Year == "1962.0")
ggplot(Data2,aes(x=Life_Expectancy,y=Fertility,colour=Continent,size =
Population))+geom_point()
```


Fertility
7.5
5.0
2.5
0
25
50
75
100
Life_Expectancy
Population
5e+08
1e+09
Continent
Africa
Americas
Asia
Europe
Oceania
NA