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# Part I: Utilize Scoped Verbs of dplyr

## (a) 請找出每年各成年人口年齡組別佔各州總人口比例之中位數

Year	Adults 19-25	Adults 26-34	Adults 35-54	Adults 55-64
2012	0.09	0.12	0.27	0.13
2013	0.09	0.12	0.27	0.13
2014	0.09	0.12	0.27	0.13
2015	0.09	0.12	0.26	0.13
2016	0.09	0.12	0.26	0.13
2017	0.09	0.12	0.26	0.13

# (b) 請列出哪些州,曾有任一人口年齡組別佔比大於 0.3

州名	佔比大於30%之年齡組別
Utah	Children 0-18

### Source codes for Part I:

library(tidyverse)

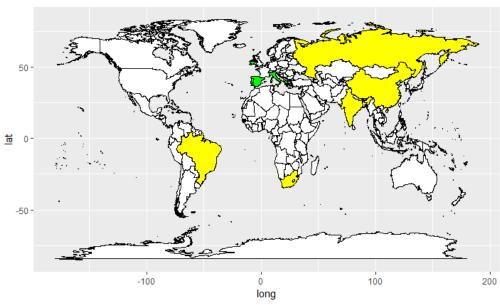
#建立工作目錄和讀取檔案 setwd(getwd()) pop.m<-read\_rds('pop\_m.rds')

#part (a)
pop.m%>%
group\_by(year)%>%
summarise\_at(vars(-Location,-'Children 0-18',-'65+'),median)%>%
view()
#part(b)

pop.m%>%
 filter\_at(vars(-Location,-year),any\_vars(.>0.3))%>%
 view()

Part II: Draw a map using the data from the maps package

Map:



### Source Code:

library(tidyverse) library(maps)

## #建立變數

world\_map<-map\_data('world')</pre>

#金磚五國

BRICS<-map\_data('world',region=c('Brazil','Russia','India','China','South Africa'))

#歐豬五國

PIIGS<-map\_data('world',region=c('Portugal','Italy','Ireland','Greece','Spain'))

```
ggplot(world_map,aes(x=long,y=lat,group=group))+
 geom_polygon(fill='white',color='black')+
 geom_polygon(data=BRICS,fill='yellow',color='black')+
 geom_polygon(data=PIIGS,fill='green',color='black')
```