Activity for Lab3

```
library(ggplot2)
library(tidyverse)
```

```
## -- Attaching packages ---------------------------------------------------------------------------- tidy
```

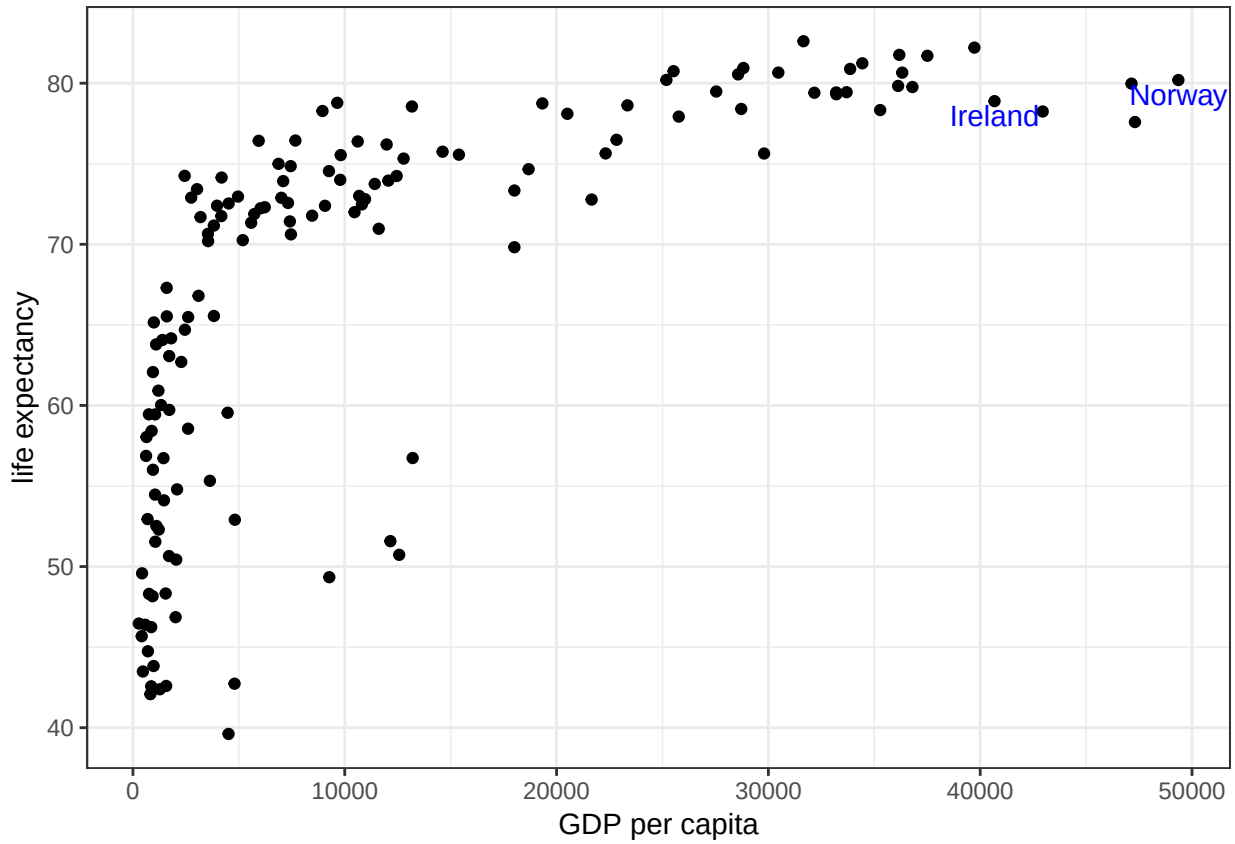
```
## v tibble  1.4.2     v purrr   0.2.5
## v tidyr   0.8.1     v dplyr   0.7.6
## v readr   1.1.1     v stringr 1.3.1
## v tibble  1.4.2     v forcats 0.3.0
```

```
## -- Conflicts ------------------------------------------------------------------------------- tidyverse_
## x dplyr::filter() masks stats::filter()
## x dplyr::lag()    masks stats::lag()
```

```
library(gapminder)

a<-gapminder%>%
filter(gdpPercap> 40000,year==2007,continent=="Europe")%>%
  select(country,gdpPercap,lifeExp)

head(gapminder)
```

```
## # A tibble: 6 x 6
##   country     continent  year lifeExp      pop gdpPercap
##   <fct>       <fct>     <int>   <dbl>    <int>     <dbl>
## 1 Afghanistan Asia       1952    28.8  8425333      779.
## 2 Afghanistan Asia       1957    30.3  9240934      821.
## 3 Afghanistan Asia       1962    32.0 10267083      853.
## 4 Afghanistan Asia       1967    34.0 11537966      836.
## 5 Afghanistan Asia       1972    36.1 13079460      740.
## 6 Afghanistan Asia       1977    38.4 14880372      786.
```

```
tidy <- gapminder%>%
  filter(year==2007)

ggplot(tidy,aes(x=gdpPercap,y=lifeExp))+
  geom_point()+
  theme_bw()+
  labs(x="GDP per capita",y="life expectancy")+
  geom_text(data = a, aes(x=gdpPercap,y=lifeExp,label=country),colour = 'blue',
            nudge_y = -.9)
```

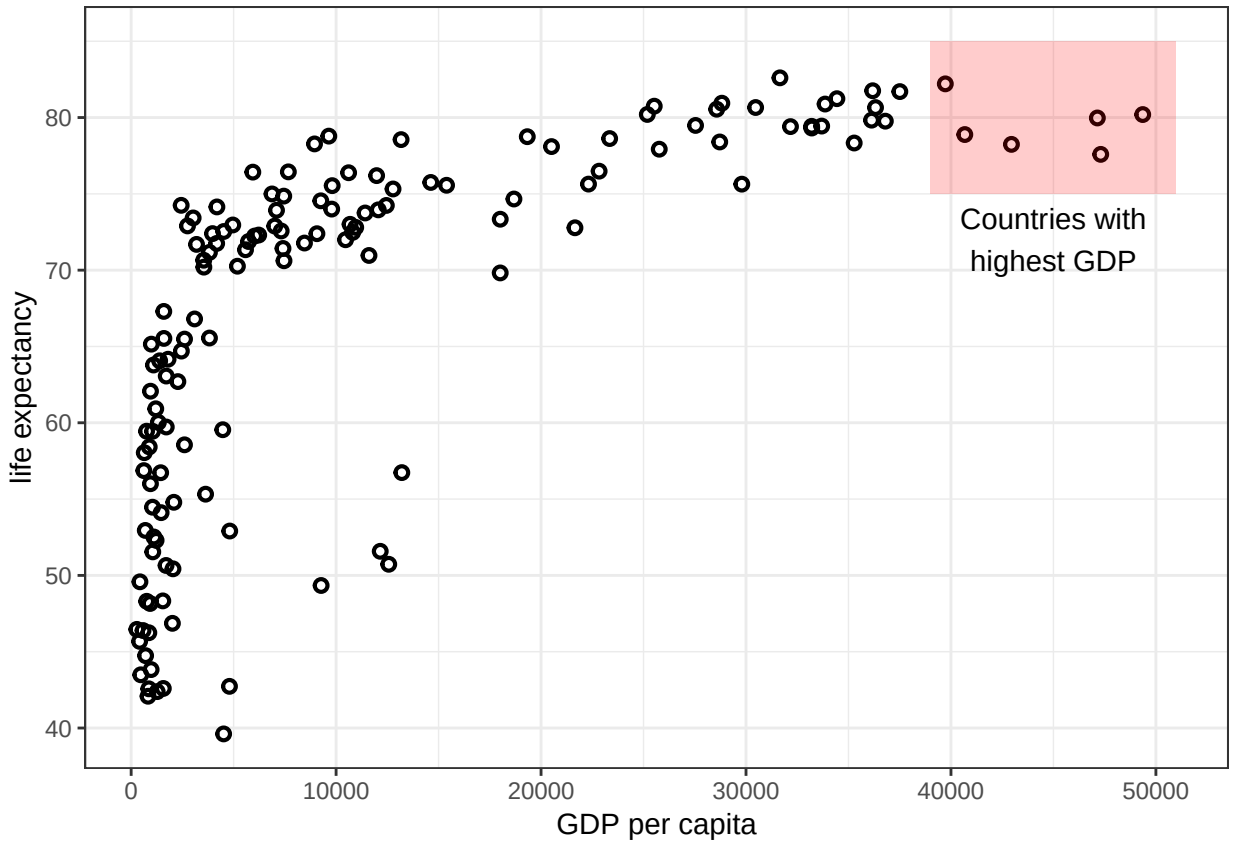


Assignment for Lab3

```
b<-tidy%>%
  arrange(desc(gdpPercap))%>%
  slice(1:6)
b
```

```
## # A tibble: 6 x 6
##   country          continent  year lifeExp       pop gdpPercap
##   <fct>            <fct>     <int>   <dbl>     <int>     <dbl>
## 1 Norway           Europe     2007    80.2   4627926    49357.
## 2 Kuwait           Asia       2007    77.6   2505559    47307.
## 3 Singapore        Asia       2007    80.0   4553009    47143.
## 4 United States    Americas   2007    78.2 301139947    42952.
## 5 Ireland          Europe     2007    78.9   4109086    40676.
## 6 Hong Kong, China Asia       2007    82.2   6980412    39725.
```

```
ggplot(tidy,aes(x=gdpPercap,y=lifeExp))+
  geom_point(shape=1,stroke=1.1)+
  theme_bw()+
  labs(x="GDP per capita",y="life expectancy")+
  annotate("rect",xmin=39000,xmax=51000,
           ymin=75,ymax=85,fill="red",alpha=.2)+
  annotate("text",x=45000,y=72,label="Countries with\nhighest GDP")
```


life expectancy
80
70
60
50
40
0
10000
20000
30000
40000
50000
GDP per capita
Countries with
highest GDP