

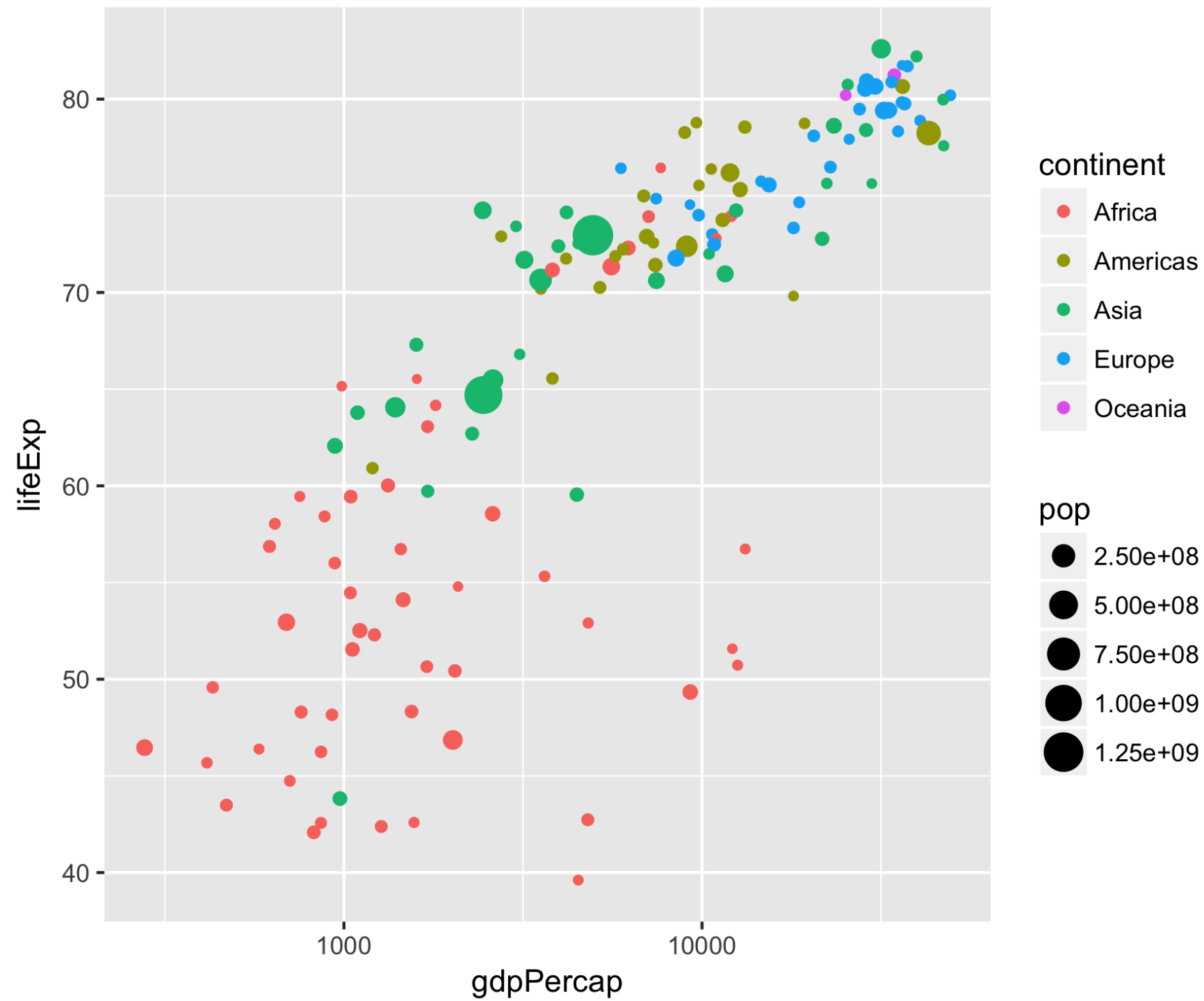
# Visualizing with ggplot2

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Chief Data Scientist, DataCamp



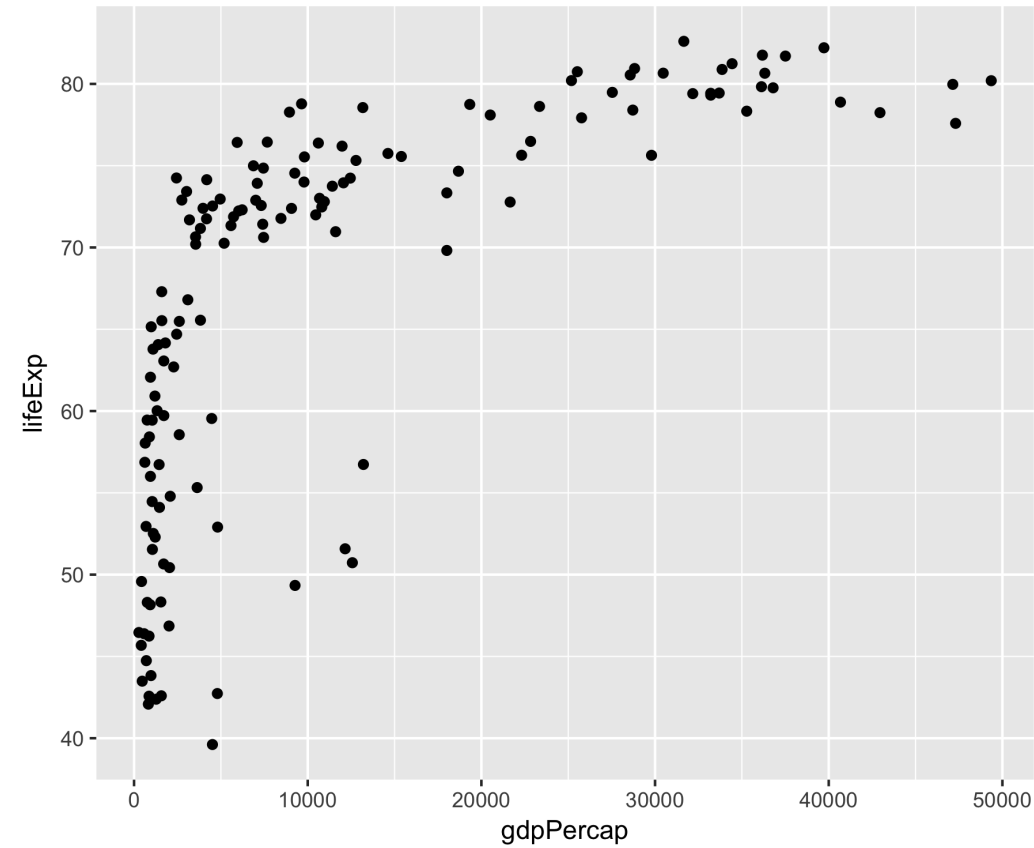
# Variable Assignment

```
gapminder_2007 <- gapminder %>%  
  filter(year == 2007)
```

```
gapminder_2007
```

```
# A tibble: 142 x 6  
  country continent year lifeExp      pop gdpPercap  
  <fct>      <fct> <int>   <dbl>    <int>    <dbl>  
1 Afghanistan      Asia  2007  43.828  31889923  974.5803  
2  Albania      Europe  2007  76.423   3600523  5937.0295  
3  Algeria      Africa  2007  72.301  33333216  6223.3675  
4  Angola      Africa  2007  42.731  12420476  4797.2313  
5  Argentina  Americas  2007  75.320  40301927 12779.3796  
6  Australia  Oceania   2007  81.235  20434176 34435.3674  
7  Austria      Europe  2007  79.829   8199783 36126.4927  
8  Bahrain      Asia    2007  75.635    708573 29796.0483  
9  Bangladesh      Asia  2007  64.062 150448339 1391.2538  
10 Belgium      Europe  2007  79.441  10392226 33692.6051  
# ... with 132 more rows
```

# Visualizing with ggplot2



```
library(ggplot2)
```

```
ggplot(gapminder_2007, aes(x = gdpPerCap, y = lifeExp)) +  
  geom_point()
```

# Let's practice!

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# Log scales

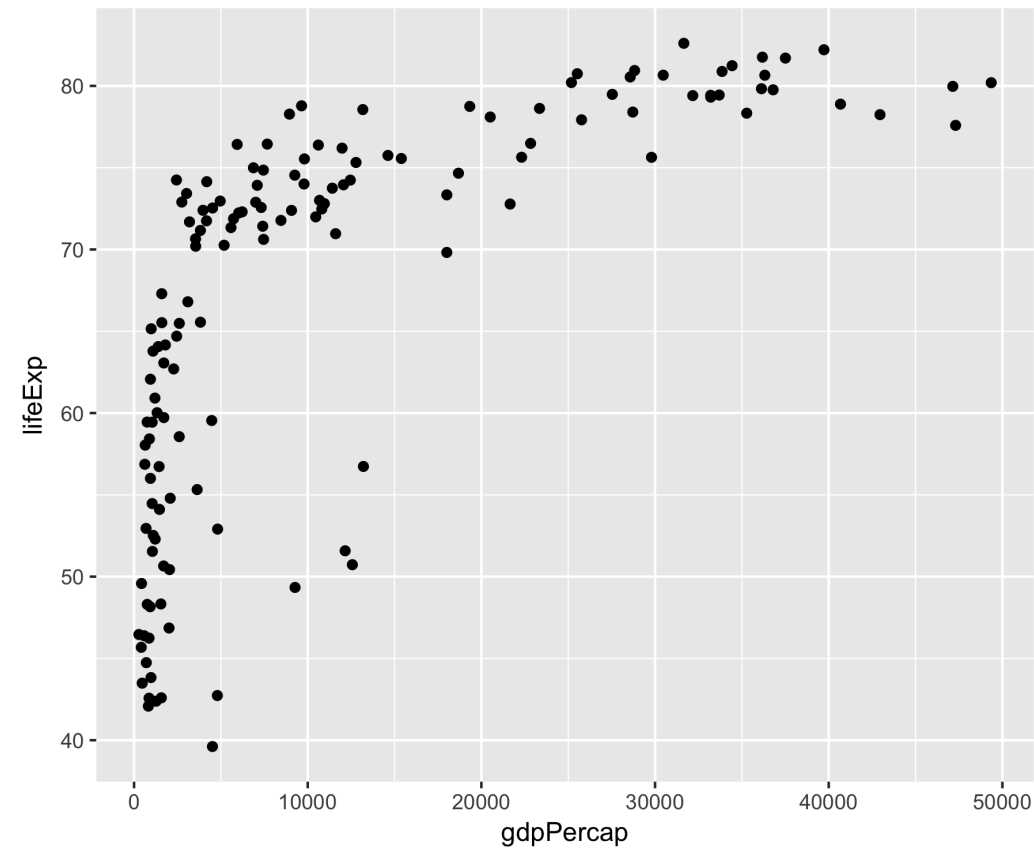
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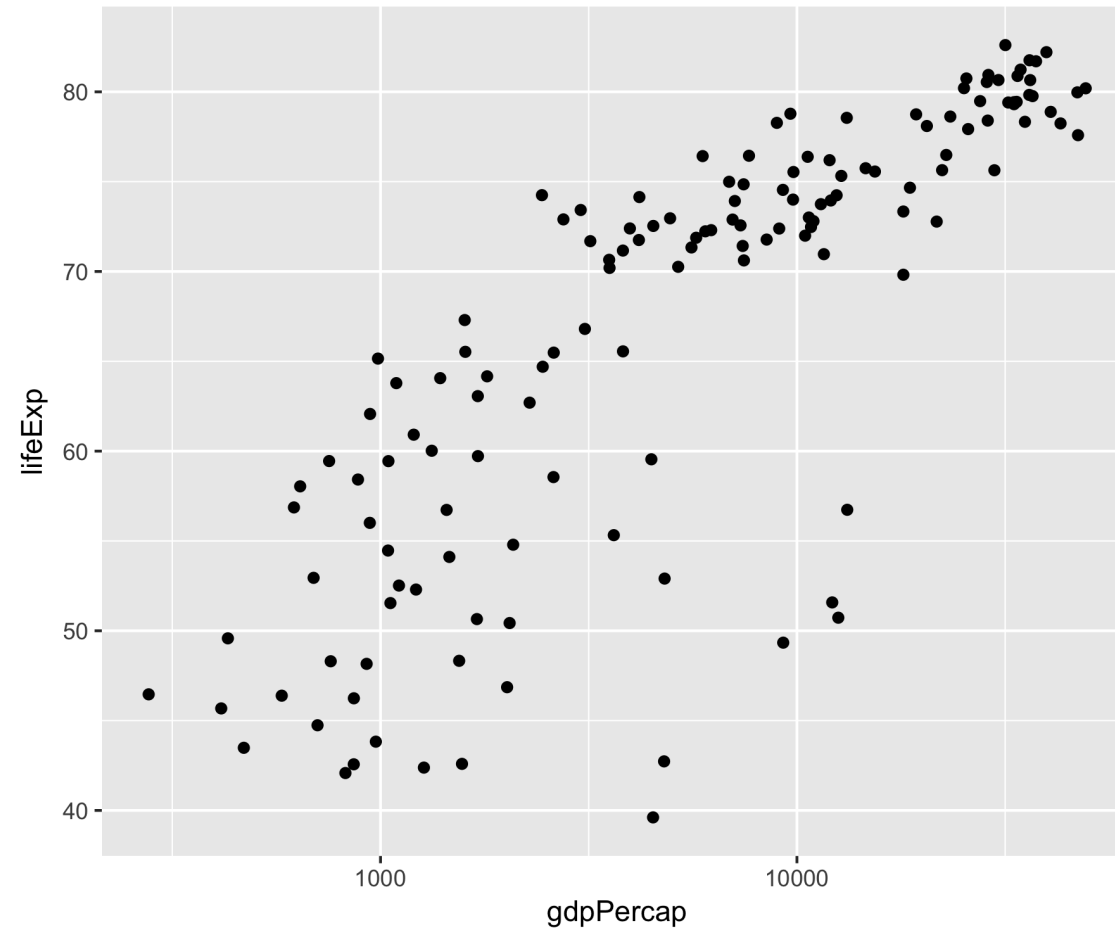
# Scatter plot



```
library(ggplot2)

ggplot(gapminder, aes(x = gdpPerCap, y = lifeExp)) +
  geom_point()
```

# Log scale



```
ggplot(gapminder_2007, aes(x = gdpPercap, y = lifeExp)) +  
  geom_point() +  
  scale_x_log10()
```



# Let's practice!

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# Additional aesthetics

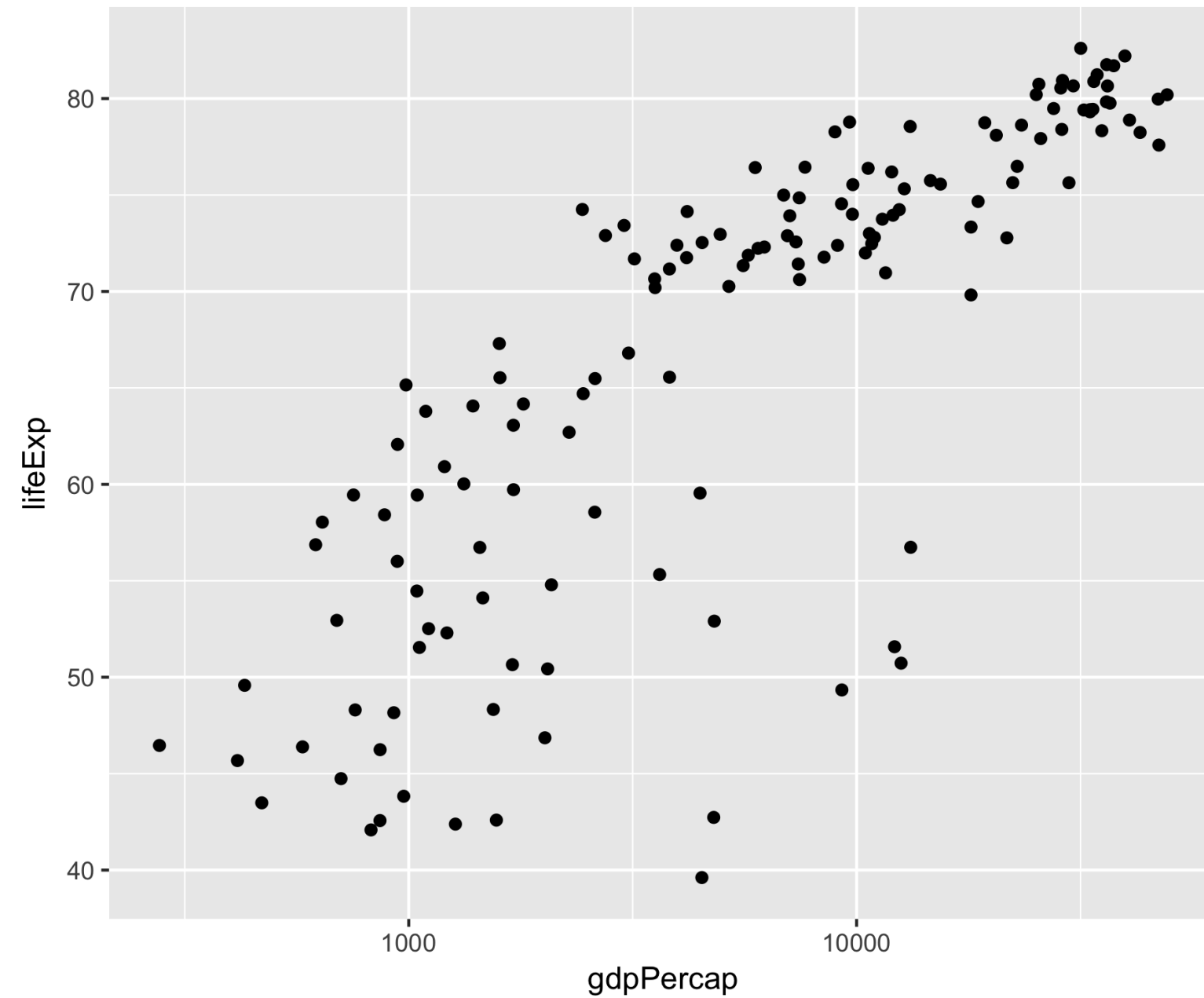
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# Scatter plots

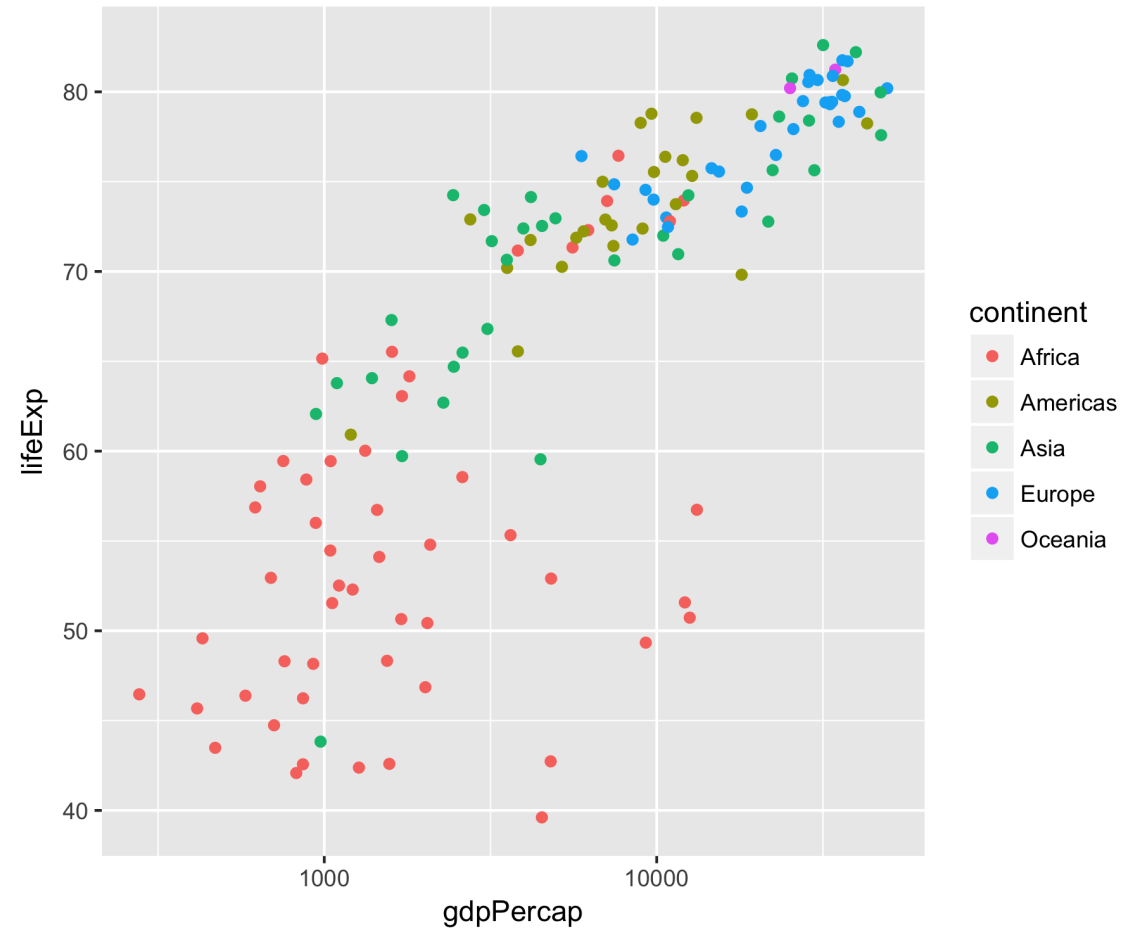


# Additional variables

```
gapminder_2007
```

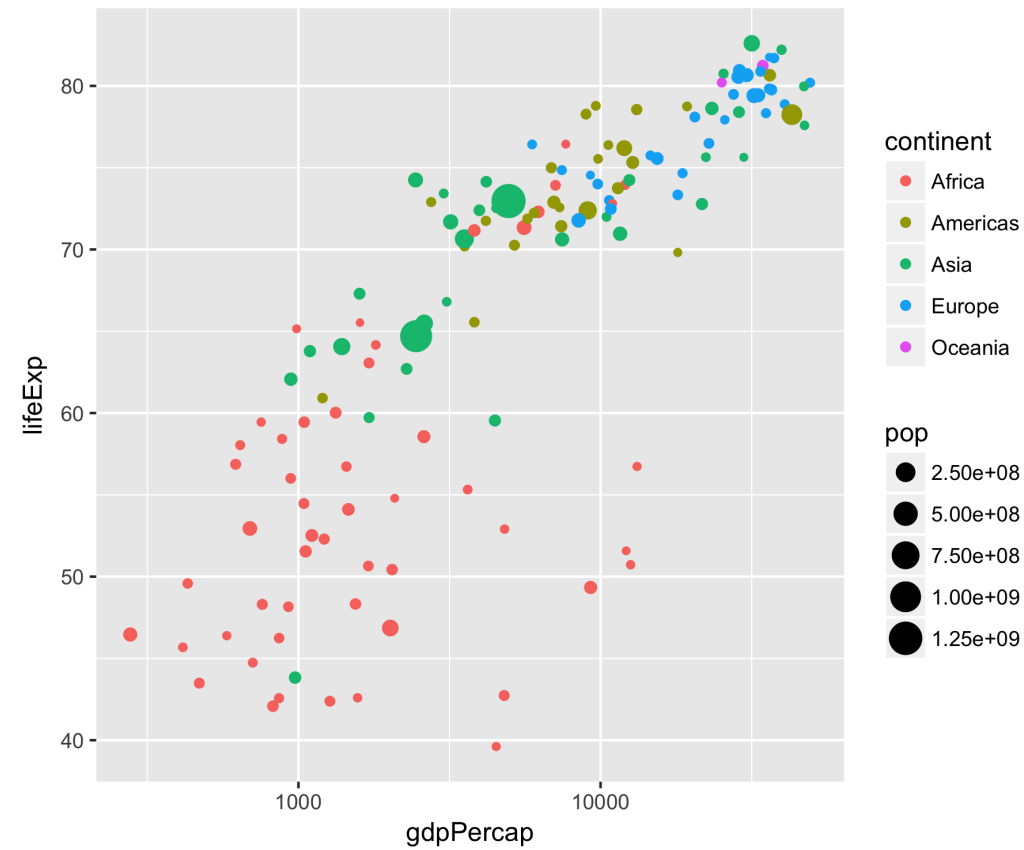
```
# A tibble: 142 x 6
  country continent year lifeExp      pop gdpPercap
  <fct>      <fct> <int>   <dbl>    <dbl>    <dbl>
1 Afghanistan      Asia  2007  43.828 31889923  974.5803
2      Albania    Europe  2007  76.423  3600523 5937.0295
3      Algeria    Africa  2007  72.301 33333216 6223.3675
4      Angola    Africa  2007  42.731 12420476 4797.2313
5    Argentina Americas  2007  75.320 40301927 12779.3796
6    Australia Oceania  2007  81.235 20434176 34435.3674
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8      Bahrain      Asia  2007  75.635   708573 29796.0483
9  Bangladesh      Asia  2007  64.062 150448339 1391.2538
10     Belgium    Europe  2007  79.441 10392226 33692.6051
# ... with 132 more rows
```

# The color aesthetic



```
ggplot(gapminder_2007, aes(x = gdpPerCap, y = lifeExp, color = continent)) +  
  geom_point() +  
  scale_x_log10()
```

# The size aesthetic



```
ggplot(gapminder_2007, aes(x = gdpPercap, y = lifeExp, color = continent,  
                           size = pop)) +  
  geom_point() +  
  scale_x_log10()
```

# Aesthetics

Aesthetic	Variable
x	gdpPerCap
y	lifeExp
color	continent
size	pop

# Let's practice!

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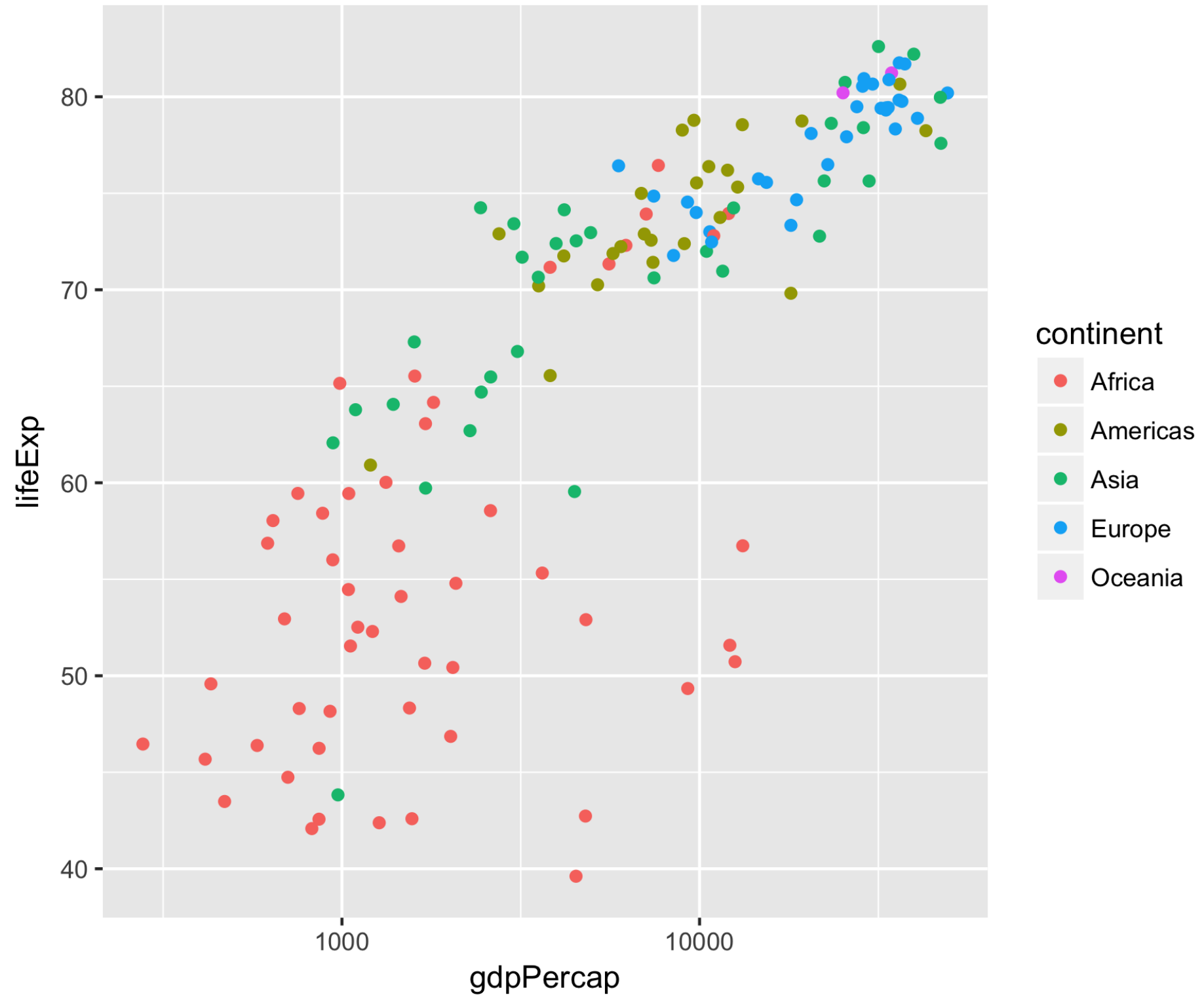
# Faceting

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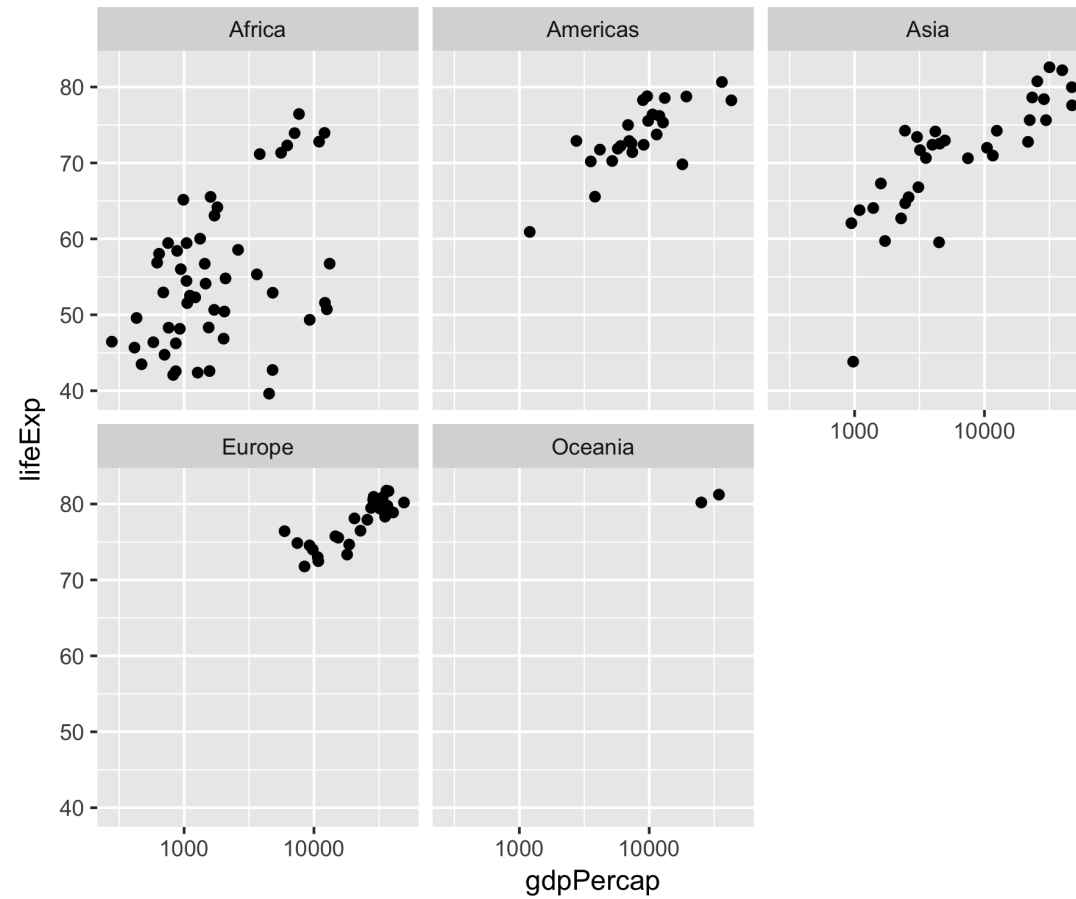


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# Faceting



```
ggplot(gapminder_2007, aes(x = gdpPercap, y = lifeExp)) +  
  geom_point() +  
  scale_x_log10() +  
  facet_wrap(~ continent)
```



# Let's practice!

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