Duvall Pinkney homework number one
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2/8/2021 spring 2021

1900	170
1910	172.1
1920	173.1
1930	173.4
1940	176.1
1950	177.1
1960	177.3
1970	178.3
1980	179

The above table contains the average height for men in the United States between 1900 and 1980. (Source: https://ourworldindata.org/human-height)

Write a Python program to convert the percent of the increase of men's height over each decade. For example, during 1900 - 1910 the average height has increased:

(172.1 - 170) / 170 = 1.235%.

Moreover, determine on during which 10 years has men's height increased the fastest.

Create a notebook file with code and execution results showing the percentages and the decade of the fastest growth. Save the notebook as a PDF file. You need to submit the PDF file to Blackboard before the deadline to receive grades.

In [1]:
```
import matplotlib.pyplot as plt
import pandas as pd
import seaborn as sns
# The following line is needed for some versions of Python and Jupyter Notebooks to display the plots in the not
%matplotlib inline
```

In [29]:
```
def men_height(earlyHeight, laterHeight):
    percentOfIncrease = (laterHeight - earlyHeight) / earlyHeight * 100
    return percentOfIncrease
```

In [3]:
```
height_data = pd.read_csv("mensHeightdata.csv")
height_data
```

Out[3]:

	1900	170
0	1910	172.1
1	1920	173.1
2	1930	173.4
3	1940	176.1
4	1950	177.1
5	1960	177.3
6	1970	178.3
7	1980	179.0

In [30]:
```
first_decade  = men_height(170,172.1)
print("1900 - 1910 percentage of increase is:", first_decade)
```

```
1900 - 1910 percentage of increase is: 1.2352941176470555
```

In [32]:
```
second_decade  = men_height(172.1,173.1)
print("1910 - 1920 percentage of increase is:", second_decade)
```

```
1910 - 1920 percentage of increase is: 0.5810575246949448
```

In [33]:
```
third_decade  = men_height(173.1,173.4)
print("1920 - 1930 percentage of increase is:", third_decade)
```

```
1920 - 1930 percentage of increase is: 0.17331022530329948
```

In [34]:
```
fourth_decade  = men_height(173.4,176.1)
print("1930 - 1940 percentage of increase is:", fourth_decade)
```

```
1930 - 1940 percentage of increase is: 1.5570934256055295
```

In [35]:
```
fifth_decade  = men_height(176.1,177.1)
print("1940 - 1950 percentage of increase is:", fifth_decade)
```

```
1940 - 1950 percentage of increase is: 0.5678591709256104
```

In [36]:
```
sixth_decade  = men_height(177.1,177.3)
print("1950 - 1960 percentage of increase is:", sixth_decade)
```

```
1950 - 1960 percentage of increase is: 0.11293054771316605
```

In [37]:
```
seventh_decade  = men_height(177.3,178.3)
print("1960 - 1970 percentage of increase is:", seventh_decade)
```

```
1960 - 1970 percentage of increase is: 0.5640157924421884
```

In [38]:
```
eighth_decade  = men_height(178.3,179.0)
print("1970 - 1980 percentage of increase is:", eighth_decade)
```

```
1970 - 1980 percentage of increase is: 0.39259674705551795
```

```
1930 - 1940 percentage of increase is: 1.5570934256055295
this increased the most.
```