

How are control colors used in a Seaborn boxplot?

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A Seaborn boxplot is a graphical representation of numerical data that displays the distribution of a variable through its quartiles. Control colors are used in a Seaborn boxplot to differentiate between different categories or groups within the data. This allows for easy comparison and interpretation of the data, as each group is assigned a distinct color. By using control colors, the viewer can quickly identify any patterns or differences between the groups, making the boxplot an effective tool for data analysis.

Control Colors in Seaborn Boxplot

You can use the following methods to control the colors of seaborn boxplots:

Method 1: Use One Specific Color

```
sns.boxplot(x='group_var', y='values_var', data=df, color='red')
```

Method 2: Use a List of Specific Colors

```
my_colors = {'group1': 'purple', 'group2': 'pink', 'group3': 'gold'}
```

```
sns.boxplot(x='group_var', y='values_var', data=df, palette=my_colors)
```

Method 3: Highlight a Specific Group

```
my_colors = {x: 'pink' if x == 'group2' else 'grey' for x in
```

```
df.group.unique()}
```

```
sns.boxplot(x='group_var', y='values_var', data=df,  
palette=my_colors)
```

Method 4: Use a Seaborn Color Palette

```
sns.boxplot(x='group_var', y='values_var', data=df,  
palette='Greens')
```

The following examples show how to use each method in practice with the following pandas DataFrame that shows the points scored by basketball players on three different teams:

```
import pandas as pd  
  
#create DataFrame  
df = pd.DataFrame({'team': ,  
'points': })  
  
#view head of DataFrame  
print(df.head())  
  
team points
```

0 A 3

1 A 4

2 A 6

3 A 8

4 A 9

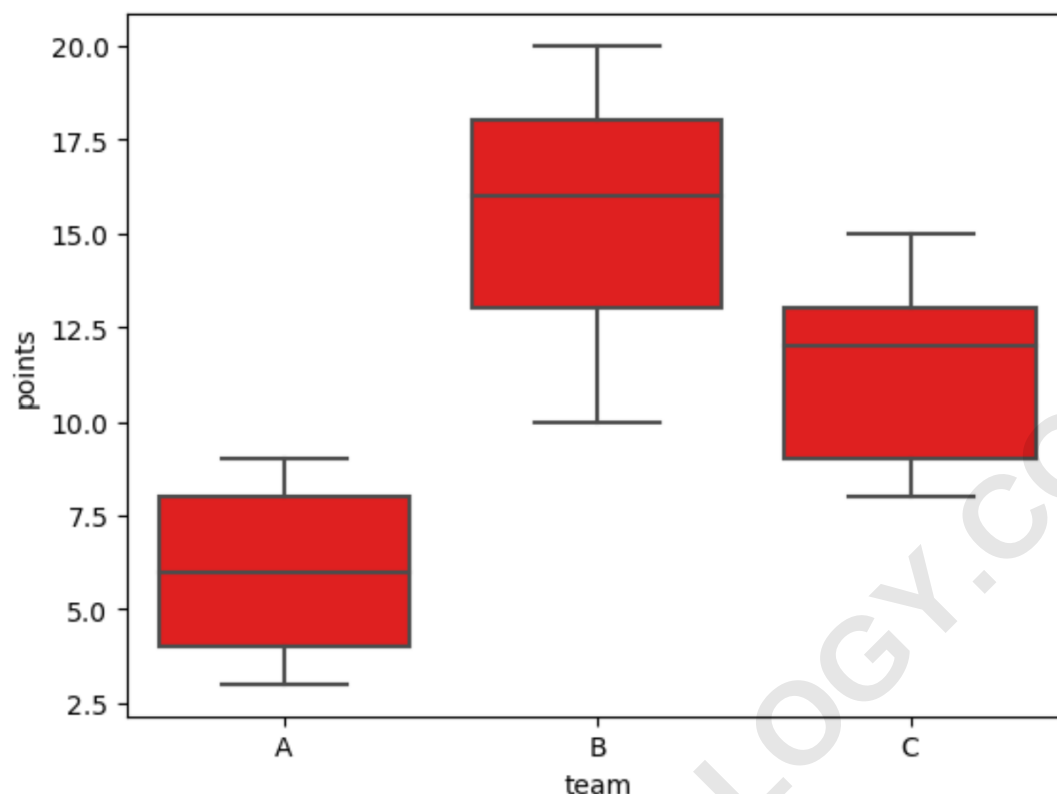
Example 1: Use One Specific Color

The following code shows how to create boxplots to visualize the distribution of points for each team and use the color red for each boxplot:

```
import seaborn as sns
```

```
#create boxplots and use red for each box
```

```
sns.boxplot(x='team', y='points', data=df, color='red')
```



Notice that each boxplot has a color of red.

Example 2: Use a List of Specific Colors

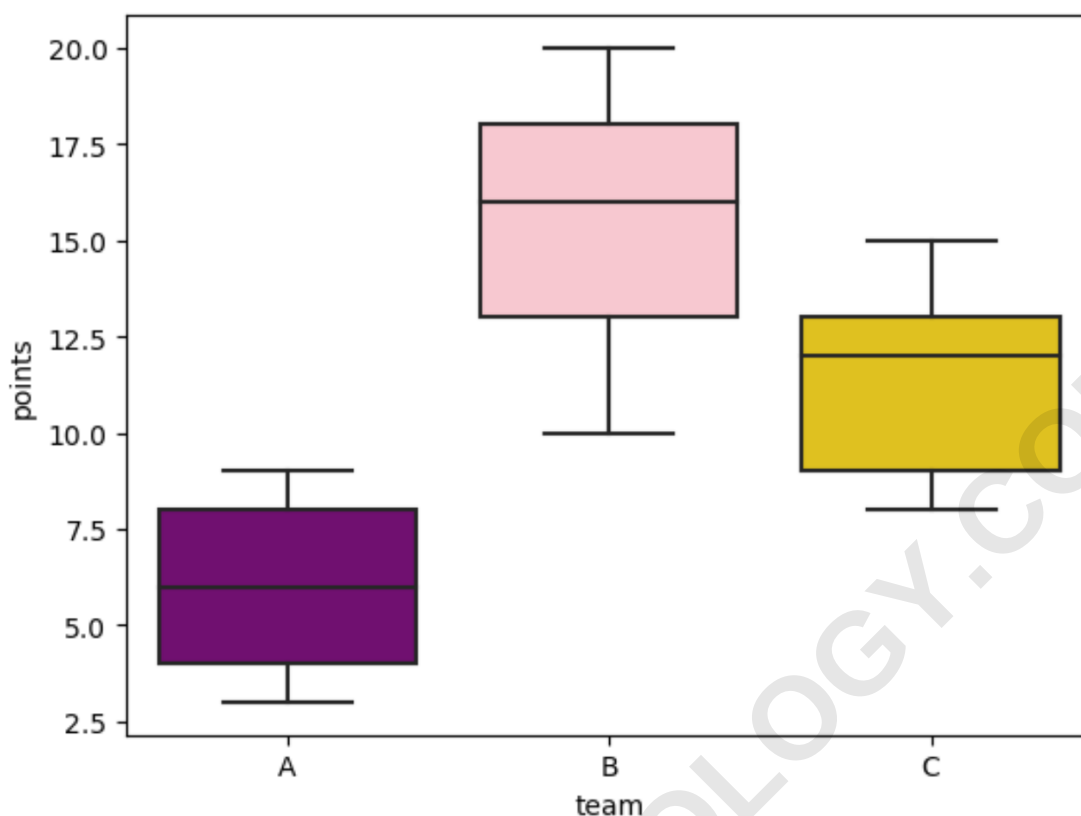
```
import seaborn as sns
```

```
#specify colors to use
```

```
my_colors = {'A': 'purple', 'B': 'pink', 'C': 'gold'}
```

```
#create boxplots using specific colors for each team
```

```
sns.boxplot(x='team', y='points', data=df,  
palette=my_colors)
```



Notice that each boxplot has the color that we specified in the dictionary called `my_colors`.

Example 3: Highlight a Specific Group

The following code shows how to highlight the boxplot for team B in pink and letting every other boxplot be grey:

```
import seaborn as sns
```

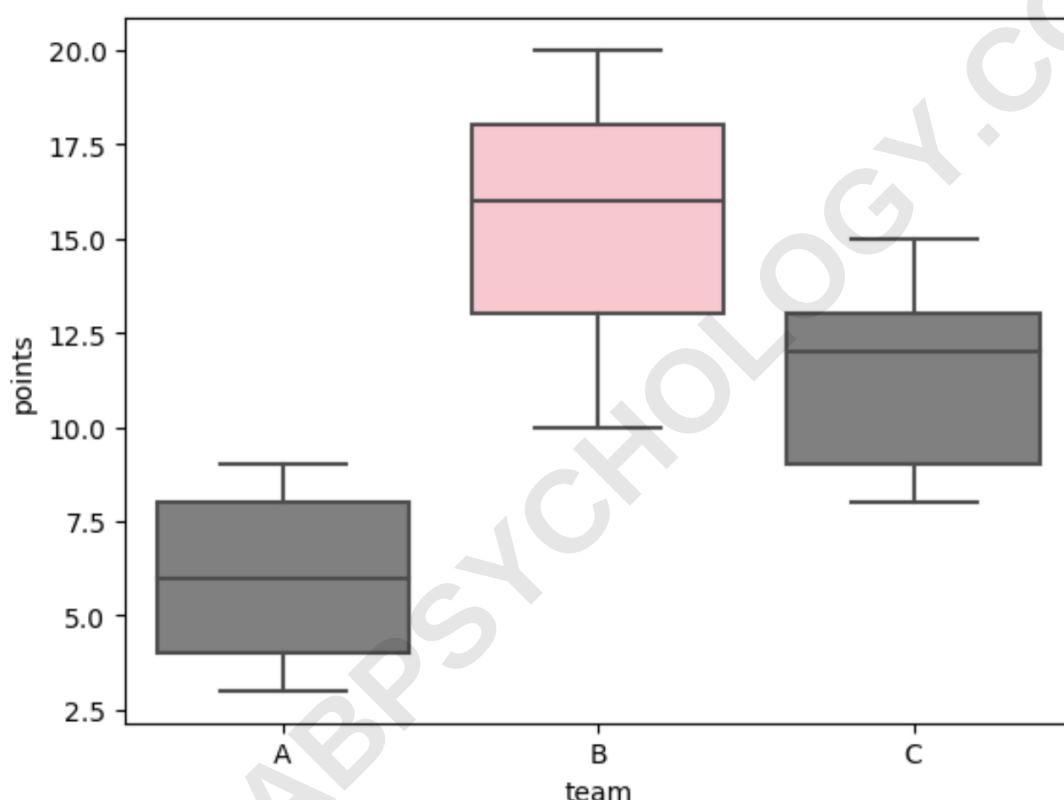
```
#specify one group to highlight in pink
```

```
my_colors = {x: 'pink' if x == 'B' else 'grey' for x in
```

```
df.team.unique()}
```

```
#create boxplots and highlight team B
```

```
sns.boxplot(x='team', y='points', data=df,  
palette=my_colors)
```



Notice that team B is highlighted in pink and all other boxplots are grey, just as we specified in `my_colors`.

Example 4: Use a Seaborn Color Palette

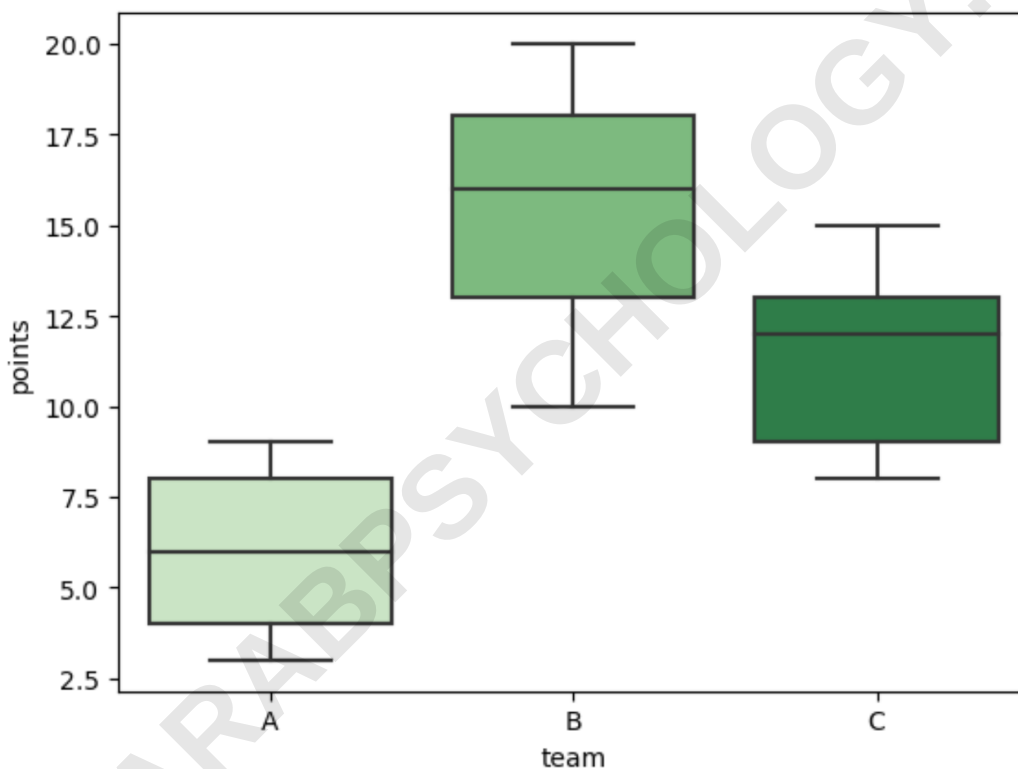
The following code shows how to use the 'Greens' seaborn color palette to use various shades of green for

each box in the boxplot:

```
import seaborn as sns
```

```
#create boxplots and use 'Greens' color palette
```

```
sns.boxplot(x='team', y='points', data=df,  
palette='Greens')
```



Notice that each boxplot is a unique shade of green.

Note: You can find a complete list of Seaborn color palettes .

The following tutorials explain how to perform other common functions in seaborn:

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