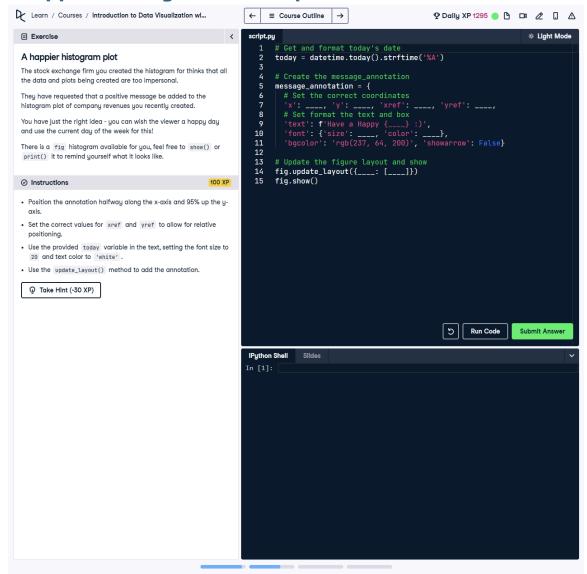
## A Happier Histogram Plot (Updated)



## **Question:**

The stock exchange firm you created the histogram for thinks that all the data and plots being created are too impersonal.

They have requested that a positive message be added to the histogram plot of company revenues you recently created.

You have just the right idea - you can wish the viewer a happy day and use the current day of the week for this!

**Instructions:** 

- 1. Position the annotation halfway along the x-axis and 95% up the y-axis.
- 2. Set the correct values for `xref` and `yref` to allow for relative positioning.
- 3. Use the provided `today` variable in the text, setting the font size to 20 and text color to `'white'`.
- 4. Use the `update\_layout()` method to add the annotation.
- 5. Display the plot using `fig.show()`.

## **Answer:**

```
# Get and format today's date
today = datetime.today().strftime('%A')

# Create the message annotation
message_annotation = {
    'x': 0.5, 'y': 0.95, 'xref': 'paper', 'yref': 'paper',
    # Set format for the text and box
    'text': f'Have a Happy {today}!',
    'font': {'size': 20, 'color': 'white'},
    'bgcolor': 'rgb(237, 64, 200)', 'showarrow': False
}

# Update the figure layout and show
fig.update_layout({'annotations': [message_annotation]})
fig.show()
```

## **Explanation of the Answer:**

The `today` variable is created using the `datetime.today()` method and formatted to display the current day of the week. An annotation is created with the `message\_annotation` dictionary, which specifies the `x` and `y` positions as relative to the plot using `xref` and `yref` set to `'paper'`. The `text` parameter includes the `today` variable, the `font` size is set to 20, and the `color` is set to `'white'`. The background color is defined as `'rgb(237, 64, 200)'` and `showarrow` is set to `False`. The annotation is added to the figure using `update\_layout()`, and the plot is displayed with `fig.show()`.