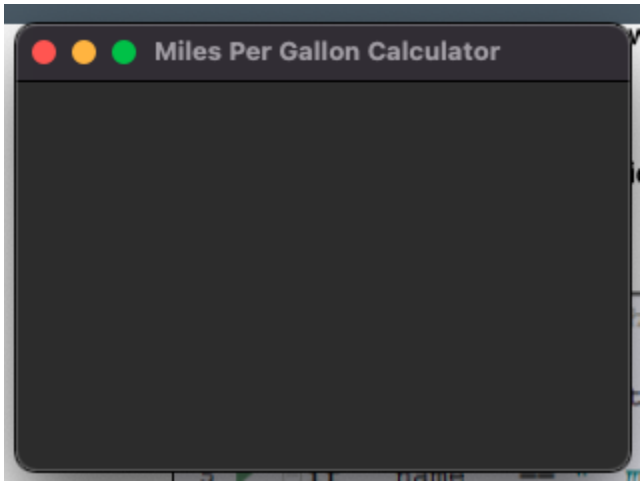
Screen Capture #1

```python
#! /usr/bin/env python3

import tkinter as tk

if __name__ == "__main__":
    # Create the root window
    root = tk.Tk()

    # Add a title to the root
    root.title("Miles Per Gallon Calculator")

    # Display the root Window
    root.mainloop()

```

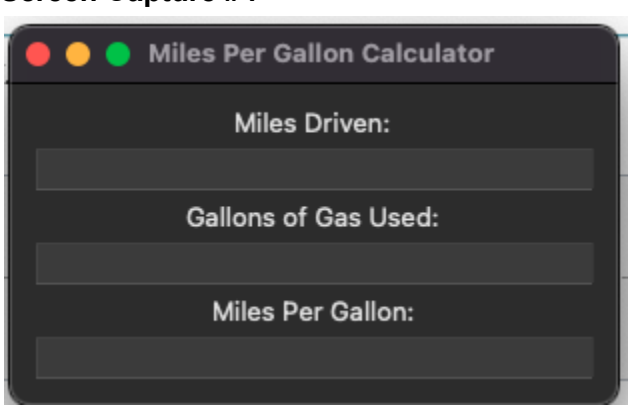
Screen Capture #2



Screen Capture #3

```python
#! /usr/bin/env python3

import tkinter as tk
from tkinter import ttk

class MPGFrame(ttk.Frame):
    def __init__(self, parent):
        ttk.Frame.__init__(self, parent, padding="10 10 10 10")
        self.pack()

        # Define string variables for text entry fields
        self.milesDriven = tk.StringVar()
        self.gallonsUsed = tk.StringVar()
        self.milesPerGallon = tk.StringVar()

        # Display the components
        ttk.Label(self, text="Miles Driven:").pack()
        ttk.Entry(self, width=30, textvariable=self.milesDriven).pack()

        ttk.Label(self, text="Gallons of Gas Used:").pack()
        ttk.Entry(self, width=30, textvariable=self.gallonsUsed).pack()

        ttk.Label(self, text="Miles Per Gallon:").pack()
        ttk.Entry(self, width=30, textvariable=self.milesPerGallon, state="readonly").pack()

if __name__ == "__main__":
    # Create the root window
    root = tk.Tk()

    # Add a title to the root
    root.title("Miles Per Gallon Calculator")

    MPGFrame(root)

    # Display the root Window
    root.mainloop()

```

Screen Capture #4

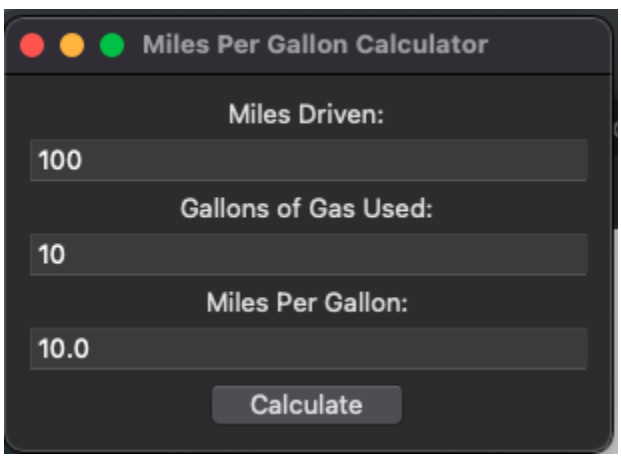


Screen Capture #5

```python

        ttk.Label(self, text="Miles Per Gallon:").pack()
        ttk.Entry(self, width=30, textvariable=self.milesPerGallon, state="readonly").pack()

        ttk.Button(self, text="Calculate",
                   command=self.calculate).pack()

    def calculate(self):
        # Get numbers from the first two text entry fields
        milesDriven = float(self.milesDriven.get())
        gallonsUsed = float(self.gallonsUsed.get())

        # Calc the miles per gallon (mpg)
        mpg = milesDriven / gallonsUsed
        mpg = round(mpg, 2)

        # Display the mpg in the third text field
        self.milesPerGallon.set(mpg)
```

NORMAL main assignment 17 01.py utf-8 | unix | python 51%

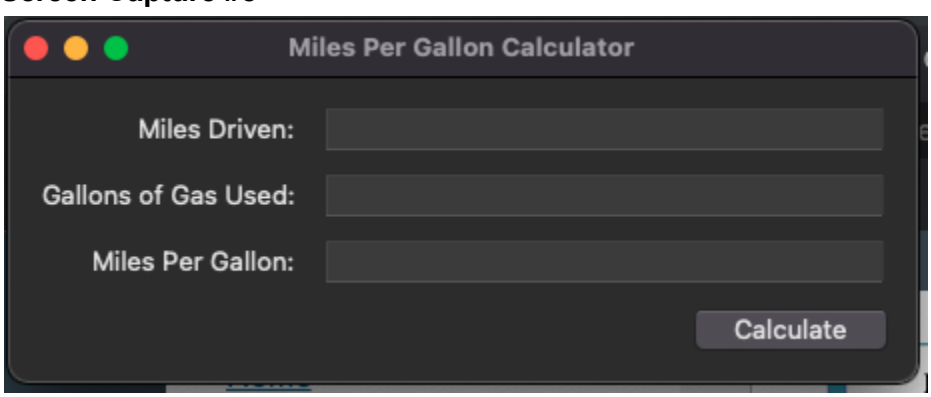
Screen Capture #6



Screen Capture #7

```python
class MPGFrame(ttk.Frame):
    def __init__(self, parent):
        ttk.Frame.__init__(self, parent, padding="10 10 10 10")
        self.pack()

        # Define string variables for text entry fields
        self.milesDriven = tk.StringVar()
        self.gallonsUsed = tk.StringVar()
        self.milesPerGallon = tk.StringVar()

        # Display the components
        ttk.Label(self, text="Miles Driven:").grid(column=0, row=0, sticky=tk.E)
        ttk.Entry(self, width=30, textvariable=self.milesDriven).grid(column=1, row=0)

        ttk.Label(self, text="Gallons of Gas Used:").grid(column=0, row=1, sticky=tk.E)
        ttk.Entry(self, width=30, textvariable=self.gallonsUsed).grid(column=1, row=1)

        ttk.Label(self, text="Miles Per Gallon:").grid(column=0, row=2, sticky=tk.E)
        ttk.Entry(
            self, width=30, textvariable=self.milesPerGallon, state="readonly"
        ).grid(column=1, row=2)

        ttk.Button(self, text="Calculate", command=self.calculate).grid(
            column=1, row=3, sticky=tk.E
        )

        # Add padding to all components
        for child in self.winfo_children():
            child.grid_configure(padx=5, pady=3)
```

Screen Capture #8



Screen Capture #9

```python
class Investment:
    def __init__(self):
        self.monthly_investment = 0
        self.yearly_interest_rate = 0
        self.years = 0

    def calculate_future_value(self):
        monthly_interest_rate = self.yearly_interest_rate / 12 / 100
        months = self.years * 12

        future_value = 0
        for i in range(months):
            future_value += self.monthly_investment
            monthly_interest_amount = future_value * monthly_interest_rate
            future_value += monthly_interest_amount

        return future_value
```

Screen Capture #10