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class StringReverser:

    def __init__(self, input_string):

        self.input_string = input_string


    def reverse_words(self):

        # Split the input string into words

        words = self.input_string.split()


        # Reverse the order of words

        reversed_words = words[::-1]


        # Join the reversed words to form the final reversed string

        reversed_string = ''.join(reversed_words)


        return reversed_string


# Example usage:

if __name__ == "__main__":

    input_string = "Hello World! Python is amazing."

    reverser = StringReverser(input_string)


    reversed_result = reverser.reverse_words()


    print(f"Original String: {input_string}")

    print(f"Reversed String: {reversed_result}")
```

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import tkinter as tk

from tkinter import messagebox


class NumberCheckerApp:

    def __init__(self, root):

        self.root = root

        self.root.title("Number Checker App")


        # Variables

        self.number_var = tk.StringVar()

        self.result_var = tk.StringVar()


        # Create widgets

        self.create_widgets()


    def create_widgets(self):

        # Entry for entering the number

        entry_label = tk.Label(self.root, text="Enter a number:")

        entry_label.pack()


        entry_number = tk.Entry(self.root, textvariable=self.number_var)

        entry_number.pack()


        # Radio buttons for choosing the check type

        check_label = tk.Label(self.root, text="Choose check type:")

        check_label.pack()
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prime_button = tk.Radiobutton(self.root, text="Prime", value="Prime", variable=self.result_var)
prime_button.pack()

perfect_button = tk.Radiobutton(self.root, text="Perfect", value="Perfect",
variable=self.result_var)
perfect_button.pack()

armstrong_button = tk.Radiobutton(self.root, text="Armstrong", value="Armstrong",
variable=self.result_var)
armstrong_button.pack()

# Button to perform the check
check_button = tk.Button(self.root, text="Check", command=self.check_number)
check_button.pack(pady=10)

def check_number(self):
    try:
        number = int(self.number_var.get())
    except ValueError:
        messagebox.showerror("Error", "Invalid input. Please enter a valid integer.")
        return

    result_type = self.result_var.get()

    if result_type == "Prime":
        result = self.is_prime(number)
    elif result_type == "Perfect":
        result = self.is_perfect(number)
    elif result_type == "Armstrong":
        result = self.is_armstrong(number)
    else:
        result = "Please choose a check type."

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messagebox.showinfo("Result", result)
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def is_prime(self, num):
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    if num < 2:
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        return "Not Prime"
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    for i in range(2, int(num**0.5) + 1):
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        if num % i == 0:
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            return "Not Prime"
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```
    return "Prime"
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def is_perfect(self, num):
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    divisors_sum = sum([i for i in range(1, num) if num % i == 0])
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    return "Perfect" if divisors_sum == num else "Not Perfect"
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def is_armstrong(self, num):
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    num_str = str(num)
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    power = len(num_str)
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    armstrong_sum = sum(int(digit) ** power for digit in num_str)
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    return "Armstrong" if armstrong_sum == num else "Not Armstrong"
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if __name__ == "__main__":
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    root = tk.Tk()
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    app = NumberCheckerApp(root)
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    root.mainloop()
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