**RV College of**

**Engineering**

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**Python EL**

COURSE CODE: 22PL15A

2022-2023

For the First Semester B.E.

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| --- | --- |
| NAME OF THE STUDENT | ADITYA VERMA |
| SECTION, BRANCH | CS ‘A’ section |
| Program | ARMSTRONG NUMBER |
| ROLL no./USN no. | RVCE22BCS132 |

**CODE**

import tkinter as tk

def is\_armstrong\_number(n):

    # Check if n is an Armstrong number

    num\_str = str(n)

    num\_digits = len(num\_str)

    sum\_of\_cubes = sum(int(digit) \*\* num\_digits for digit in num\_str)

    return sum\_of\_cubes == n

def check\_number():

    # Get the number entered by the user

    number = int(number\_entry.get())

    # Check if the number is an Armstrong number

    if is\_armstrong\_number(number):

        result\_label.config(text=f"{number} is an Armstrong number")

    else:

        result\_label.config(text=f"{number} is not an Armstrong number")

**CODE**

# Create the main window

window = tk.Tk()

window.title("Armstrong Number Checker")

# Create the user interface elements

number\_label = tk.Label(window, text="Enter a number:")

number\_entry = tk.Entry(window)

check\_button = tk.Button(window, text="Check", command=check\_number)

result\_label = tk.Label(window, text="")

# Arrange the user interface elements in a grid

number\_label.grid(row=0, column=0)

number\_entry.grid(row=0, column=1)

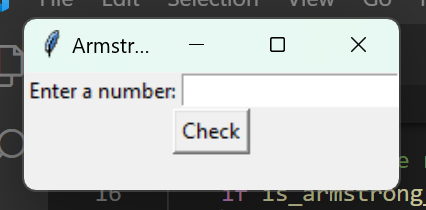
check\_button.grid(row=1, column=0, columnspan=2)

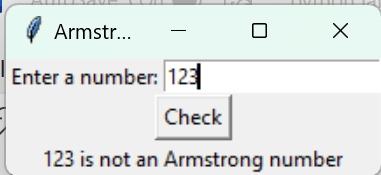
result\_label.grid(row=2, column=0, columnspan=2)

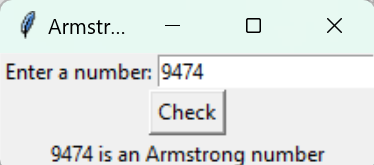
# Start the main event loop

window.mainloop()

**OUTPUT**

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