

(TR-103) PROMPT ENGINEERING –

Training Day 13 Report:

Functions and Function Calling with API Integration

What is a Function?

A function is a reusable block of code created to perform a specific task. Functions make code modular, avoid repetition, and separate logic for better readability and testing.

What is Function Calling?

Function calling is the process of invoking a function in code. It is important for executing specific tasks, managing multiple features in a program, and integrating AI or API-based interactions in real-time applications.

Simple Function Implementation: name()

We implemented a basic function name() that required no input and returned a hardcoded output such as “Hello, I am Jaspinder Kaur ”. This activity helped us understand function definition, invocation, and return values in Python.

Multiple Function Calling – Interactive System

We created multiple functions to simulate a basic personal assistant:

- name(): Returns the name of the assistant or user.
- quotes(): Provides a random motivational quote.
- health_tips(): Suggests hydration reminders, breathing exercises, and nutrition tips.
- weather(): Integrated with a Weather API to fetch real-time data including temperature, weather description, humidity, and wind speed. This demonstrated API requests, JSON parsing, and live data handling.

Function Calling for Cricket Live Scores

We implemented a live cricket score tracker using criAPI with the following features:

- **live_score():** Displayed current match details such as teams, runs, overs, wickets, and status.
- **match_summary():** Provided an overall game overview.
- **player_stats():** Showed top performer information.

This task involved handling API keys securely, fetching live data through Python's requests module, parsing JSON, and structuring the results into user-friendly outputs.