A Range of Agency Levels

Agency Level	Description	How that's called	Example Pattern
☆☆☆☆	LLM output has no impact on program flow	Simple processor	`process_llm_output(llm_response)`
★☆☆☆	LLM output determines basic control flow	Router	`if llm_decision(): path_a()` `else: path_b()`
★★☆☆	LLM output determines function execution	Tool call	`run_function(llm_chosen_tool,` `llm_chosen_args)`
★★★☆	LLM output controls iteration and program continuation	Multi-step Agent	`while llm_should_continue():` `execute_next_step()`
★★★★	One agentic workflow can start another agentic workflow	Multi-Agent	`if llm_trigger():` `execute_agent()`

The Road Towards Increased Agency

Agency Level	Description	Date	Research Paper
Router	LLM output controls if/else switch.	29 Mar 2022	Language Models that Seek for Knowledge: Modular Search & Generation for Dialogue and Prompt Completion
Tool-calling	LLM output determines function call: `run_function(llm_chosen_tool,` `llm_chosen_args)`	1 Jun 2022	WebGPT: Browser-assisted question-answering with human feedback

Multi-step agent	LLM output determines if the execution loop continues: `while`
	`post_process(llm_output): ... #`
	`Perform an action`
		10 Mar 2023	ReAct: Synergizing Reasoning and Acting in Language Models

Code agent	LLM can write and execute code, defining new tools if needed.	7 Jun 2024	Executable Code Actions Elicit Better LLM Agents

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