

### Basic Prompt structure

Acting as a [ROLE] perform [TASK] in [FORMAT]

#### Act as [ROLE]

Website Designer

Therapist

Prompt Engineer

Project Manager

Mindset Coach

Lawyer

Journalist

Inventor

Ghostwriter

Chief Financial

Officer

Best Selling Author

Analyst

Advertiser

Accountant

Marketer

#### Code Generation

Can you generate code for [add specific programming task or problem] in [specify programming language or framework]?

[Example]: Can you generate code for a function that takes a list of n integers and returns a new list of only even numbers from the input list? I want you to create this function in the Python language.

What is the most efficient or elegant way to generate code for [insert specific programming task or solution] in [insert programming language or framework]?

[Example]: What is the most efficient way to write code in JavaScript to find the sum of the list of integers?

Is there a library or tool that can assist with generating code for [insert specific programming task or goal] in [insert programming language or framework]?

#### Code Generation (cont)

[Example]: Is there any library or tool that can help me generate code for working with dates in Java?

Write a [language] function to filter [data structure] based on [condition] with the following inputs: [input variables] and expected output: [output description].

[Example]: Write a Python function to filter a list of integers based on whether they are greater than 5, with the following input variables: Input: list of integers Expected output: a new list containing only the integers greater than 5.

Design a [language] algorithm to solve [problem] using [strategy or technique].

[Example]: Design a C++ algorithm to find the maximum element in an array using the divide and conquer strategy.

#### Code Refactoring

Suggest the refactoring improvements for the following [language] code: [code snippet].

Optimize the following [language] code for lower memory usage: [code snippet].

Refactor the following [language] code to improve its error handling: [code snippet].

#### Natural Language Processing

Perform text classification of the following text: [text sample].

Analyze the sentiment of the following product review: [product review].

List out the key phrases in the social media posts: [social media post].

#### Personalized Development Learning

What are the available free resources to learn [programming language/technology]?

What learning path should I follow to become a proficient [IT job role]?

Suggest coding challenges or competitions improve my [programming language/technology] skills.

#### Requirement Analysis

Analyze the following project requirements and suggest the technology stack: [project requirements].

Interpret the following project requirements and provide a detailed project plan with milestones and deliverables: [project requirements].

Convert the following project requirements into user stories: [project requirements].

#### Create a [TASK]

Summary

Social edia Post

SEO Keywords

Blog Post

Email Sequence

Essay

Recipe

Product

Description

Cover Letter

Analysis

Book Outline

Sales Copy

Article

Video Script

Headline

### Code Completion

Complete the [language] code that [function]: code snippet

[Example]: Complete the Python code that takes the list of integers and returns the sum of all elements: `def sum_list(nums):`

Complete the [language] code to convert [data structure] into [output format]: [code snippet].

[Example]: Complete the Java code to convert an integer into a string: `import java.util.*; public class Example{`

Finish the [language] implementation of a multithreading solution for [problem]

[Example]: Finish the Java implementation of a multithreading solution for a program that calculates the sum of even and odd numbers in a given range. `import java.util.*; public class evenodd {`

### Automated Testing

Write a test script for the given [language] code that covers [functional/non-functional] testing.

Design a performance testing strategy for a [web/mobile] app for [resource usage, latency, and throughput].

Create a test suite for a [language] library or framework that validates its functionality and stability.

Create an end-to-end testing strategy for a [mobile/web] app that covers critical user workflows.

### Code Translation

Translate the following [language] code for calculating the average of user input numbers into [desired language]: [code snippet].

### Algorithm Development

Write a heuristic algorithm to solve a specific problem: [problem description]

[Example]: Write a heuristic algorithm to solve a travel salesman problem.

Analyze the following machine learning algorithm to improve its accuracy: [algorithm/pseudocode].

[Example]: Consider that we have a current algorithm that predicts customers' sentiments. The text prompt would be: Analyze the following machine learning algorithm to improve its accuracy: Compile a database of client reviews together with the associated emotions (good or negative). Clean up the text and transform it to a numerical representation (such as bag-of-words) to prepare the data. Create training and test sets from the dataset. Utilize the training set to train a Naive Bayes classifier. Use measures like accuracy, precision, recall, and F1 score to assess the classifier's performance on the test set.

Create a streaming algorithm to process data in real-time for [a specific purpose].

[Example]: Create a streaming algorithm to process data in real-time for the stock market.

Assess the trade-offs of the given algorithm in terms of performance and resource usage: [algorithm or pseudocode].

[Example]: Asses the trade-offs of the following algorithm in terms of performance and resource usage:

### Show as [FORMAT]

Spreadhseet

Code

Roch TEXT

Summary

XML

Graphs

CSV file

### Show as [FORMAT] (cont)

Gantt Chart

JSON

Plain Text

File

HTML

Markdown

A List

PDF

A Table

### Networking and Security

Create a secure [language] function that performs [specific task] while preventing [security threat or vulnerability].

[Example]: Write a secure Python function or module that performs password hashing while preventing SQL injection attacks.

Design a secure protocol for [specific use case] for my [app/website].

[Example]: Design a secure and efficient protocol for secure communication between a client and a server over the Internet.

Evaluate the security of the given [language] code when interacting with [external service/API].

[Example]: Evaluate the security of the given Python code when interacting with a database:

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### Networking and Security (cont)

[Example]: Design a secure and efficient protocol for secure communication between a client and a server over the Internet.

Evaluate the security of the given [language] code when interacting with [external service/API].

[Example]: Evaluate the security of the given Python code when interacting with a database:

### Code Review

Review the following [language] code for code smells and suggest improvements: [code snippet].

Review the following [language] code for scalability issues: [code snippet].

Evaluate the following [language] code for compatibility with [technology]: [code snippet].

Evaluate the test coverage of the [language] code: [code snippet].

### Bug Detection

Locate any logical errors in the following [language] code snippet: [code snippet]

[Example]: Locate any logical errors in the following JavaScript code: [code snippet]

Find the performance issues in the [language] code: code snippet.

[Example]: Find the performance issues in the Python code: [code snippet]

Check for potential deadlock issues in the [language] code: code snippet.

Check the potential deadlock issues in Java code: [code snippet]

Analyze the following [language] code and determine potential SQL injection vulnerabilities: [code snippet]

[Example]: Analyze the following PHP code and determine potential SQL injection vulnerabilities: [code snippet]

