# Prompt Writing on ChatGPT

## Introduction:

"The process of designing and optimizing prompts for use with a language model"

Goal: Create prompts with high-quality outputs

**Five Step Involves:**

1. Defining the task          –          Special Input and Output Format
2. Generating Prompt      –          Creating example Input & Output to train
3. Evaluating Prompt       –          Testing & Assessing the Prompts
4. Refining Prompt           –          Changing & Adjusting words and parameters
5. Repeating the process [Warnings: Try to repeat this step less times]

## Types of Prompts:

Types of main three prompts according to OpenAI:

1. Zero-Shot Prompts
2. Few-Shot Prompts
3. Fine-Tuning Prompts

1. Zero-Shot Prompts:
   A. No Specific Training Data
   B. Generate Response based on general knowledge
   C. For example:
      - Write a paragraph about the benefits of exercise!
   D. Coherent Response
   E. No prior training on that specific topic

2. Few-Shot Prompts:
   A. Small Amount of training Data
   B. Generate Response based on data provides
   C. For example:
      - Translate the following sentence into German: "I am feeling god today"
   D. Learns from examples given to it
   E. Accurate responses to similar prompts

3. Fine-Tuning Prompts:
    A. Trained on Specific task or domain
    B. Smaller amount of labelled data
    C. For example:
        - Generating responses to customer support inquiries by fine-tuning it on dataset of customer support conversation
    D. Generate accurate and relevant responses


Other types of prompts:

1. Single-shot Prompts – Provide Input and except corresponding output

   Example:
   "Write a poem about the ocean?"
   "Generate a story about a time-travelling detective"

2. Dialogue Prompts – Conversation between two or more speakers

   Example:
   User: "Hi, can you help me book a hotel room."
   GPT-3.5: "Of course! What city and dates are you looking for?"
   User: "I need a room in New York from May 15th to May 20th."
   GPT-3.5: "I found several options for you."

3. Conditional Prompts – Specifying set of conditions which must be followed

   Example:
   "Generate a list of Italian pasta recipes that don't require cheese."
   "Provides a summary of the latest scientific on climate change."

4. Inference Prompts – Draw a conclusion based on a given input

   Example:
   "What is the likelihood of a major earthquake occurring in California in the next year?"
   "Based on recent polls, who is the frontrunner for the upcoming presidential election?"

5. Question-answering Prompts – Provide a specific answer to a question

   Example:
   "What is the capital of Japan?"
   "Who was the first person to walk on the moon?"

## Key elements while writing a prompt:

1. Context – Brief Introduction to the topic
2. Expert Persona – Role of Expertise
3. Verbs – Guide the output required
4. Length & Output Type – Format & Structure
5. Task & Objective – Description & Goals
6. Tone – Mood for Output
7. Target Audience - Demographic
8. References – Information Sources
9. Purpose – Goal or Intention
10. Keywords – Terms & Concept
11. Notes – Additional Information

## Input & Output Format:

Input:

1. Sentences, Essays, Paragraphs, Bullet Points, Numbered lists etc.

Output:

1. Essay, Case Study, Review, Summary – Academic Writing
2. Social media posts, Product Description, Sales & Newsletter – Marketing
3. Business Plans, Memos, Contracts, Proposal – Business Tasks
4. Novel, Poems, Short Stories – Creative Writing
5. Reviews, Cover Letters, CVs, Resume, Script, Invoices, Emails – Others

## Some Basic Prompts:

1. Website Evaluation
2. Interview Questions
3. Philosophy Discussion
4. Literary Analysis
5. Marketing Campaign Planning
6. Career Advice
7. Environmental Issues Discussion
8. Travel Planning
9. Website Content Creation
10. Psychological Analysis