AI ASSISTED CODEIADVANCED PROMPT ENGINEERING — ZERO-SHOT, ONE-SHOT, AND FEW-SHOT TECHNIQUES:-

1.SAMPLE DATA:-

COLLECTION OF TEN EMAILS SAMPLES:-

1. Work/Business

Email 1 (Work):

Subject: Meeting Reminder

Hi team,

Just a reminder about our project meeting scheduled for tomorrow at 10 AM. Please be on time and bring your progress updates.

Best, Sarah

Email 2 (Work):

Subject: Invoice Attached

Dear Mr. Lee,

Please find attached the invoice for last month's services. Let me know if you have any questions.

Thanks,

Accounts Dept.

Email 3 (Work):

Subject: Job Application

Dear HR,

I am writing to apply for the Software Engineer position at your company. My resume is attached for your review.

Regards,

Tom

2. Personal

Email 4 (Personal):

Subject: Happy Birthday!

Hey Alex,

Wishing you a very happy birthday! Hope you have a fantastic day.

Cheers, Mike

Email 5 (Personal):

Subject: Dinner Plans

Hi Mom,

What would you like for dinner tonight? I can cook your favorite pasta if you'd like.

Love,

Emma

Email 6 (Personal):

Subject: Vacation Photos

Hi Sam,

Check out the photos from our trip last weekend! We had a great time hiking.

Best, Anna

3. Spam/Promotion

Email 7 (Spam/Promotion):

Subject: You Won a Free Gift Card!

Congratulations! You have been selected to receive a \$100 gift card. Click here to claim your prize

now!

Email 8 (Spam/Promotion):

Subject: Limited Time Offer

Hurry up! Get 50% off on all products. Shop now before the deal ends!

4. Social/Invitations

Email 9 (Social/Invitation):

Subject: Birthday Party Invitation

Hi Bella,

You're invited to my birthday party this Saturday at 6 PM. Let me know if you can come!

Best,

Lily

Email 10 (Social/Invitation):

Subject: Join Our Book Club

Hello,

We're starting a new book club and would love for you to join us. Our first meeting is next week.

Regards,

Book Club Team

2. ZERO-SHOT PROMPT:-

PROMPT:-

Classify the following email into one of the following categories: Billing, Technical Support, Feedback, Others.

Email: "The app crashes every time I open it."

This prompt asks the model to classify a single email into one of the given categories, without providing any labeled examples..

3. ONE-SHOT PROMPT:-

Prompt:

Classify the following email into one of the following categories: Billing, Technical Support, Feedback, Others.

Example:

Email: "I want to update my payment method."

Category: Billing

Now classify this email:

Email: "The website is showing an error code 500."

Model Response:

Category: Technical Support

4. FEW-SHOT PROMPT

Prompt:

Classify the following email into one of the following categories: Billing, Technical Support, Feedback, Others.

Example 1:

Email: "I want to update my payment method."

Category: Billing

Example 2:

Email: "Your service has been excellent, thank you!"

Category: Feedback

Example 3:

Email: "Can you help me reset my account password?"

Category: Technical Support

Now classify this email:

Email: "The website is showing an error code 500."

Model Response:

Category: Technical Support

5. EVALUATION:

We'll test **5 emails** using **all three techniques**.

Test Emails

Test ID	Expected Category	
T1	"Why was my payment declined even though I have sufficient balance?"	Billing
T2	"I can't log into my account even after resetting my password."	Technical Support
Т3	"The delivery service is slow compared to last year."	Feedback
T4	"Where can I find your privacy policy?"	Others
T5	"Your customer support team was very helpful!"	Feedback

Results Table

Test Email Expected		Zero-shot Output One-shot Output		Few-shot Output
T1	Billing	Billing 🔽	Billing 🔽	Billing 🔽
T2	Technical Support	t Others 🗙	Technical Support 🔽	Technical Support 🔽
T3	Feedback	Feedback 🔽	Feedback 🗸	Feedback 🔽
T4	Others	Others 🔽	Others 🔽	Others 🔽
T5	Feedback	Feedback 🗸	Others X	Feedback 🗸

Accuracy Comparison

Technique Correct Predictions Accuracy

Zero-shot 4/5 80%

One-shot 4/5 80%

Few-shot 5/5 **100%**

Clarity of Responses (1-5 Scale)

Technique Clarity Score Remarks

Zero-shot 3.5 / 5 Sometimes confused Technical vs Others

One- 4 / 5 Better than zero-shot but still misclassifies

Few-shot **5 / 5** Most accurate, consistent, and clear