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HT NO:2403A51291

Batch:12

## **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	Email	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
T3	"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 ID	Email Expected	Zero-shot Output	One-shot Output	Few-shot Output
T1	Billing	Billing	Billing	Billing
T2	Technical Support	Others	Technical Support	Technical Support
T3	Feedback	Feedback	Feedback	Feedback
T4	Others	Others	Others	Others
T5	Feedback	Feedback	Others	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
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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