

Tables-

```
CREATE TABLE NewsAnalysis (
    ArticleUrl NVARCHAR(450) PRIMARY KEY,
    Title NVARCHAR(MAX),
    PublishedDate DATETIME2,
    Sentiment NVARCHAR(50),
    PositiveScore FLOAT,
    NegativeScore FLOAT,
    NeutralScore FLOAT
);
```

```
CREATE TABLE ArticleEntities (
    Id INT IDENTITY(1,1) PRIMARY KEY,
    ArticleUrl NVARCHAR(450),
    EntityText NVARCHAR(255),
    EntityType NVARCHAR(50)
);
```

```
CREATE TABLE ArticleKeyPhrases (
    Id INT IDENTITY(1,1) PRIMARY KEY,
    ArticleUrl NVARCHAR(450),
    KeyPhrase NVARCHAR(255) );
```

Stored Procedure-

```
CREATE PROCEDURE sp_InsertArticleEntities
    @ArticleUrl NVARCHAR(450),
    @EntitiesJson NVARCHAR(MAX)
AS
BEGIN
    INSERT INTO ArticleEntities (ArticleUrl, EntityText, EntityType)
    SELECT
        @ArticleUrl,
        [text],
        [category]
    FROM
        OPENJSON(@EntitiesJson)
    WITH (
        [text] NVARCHAR(255) '$.text',
        [category] NVARCHAR(50) '$.category'
    );
END
```

```
CREATE PROCEDURE sp_InsertArticleKeyPhrases
```

```
    @ArticleUrl NVARCHAR(450),
    @KeyPhrasesJson NVARCHAR(MAX)
AS
```

```
BEGIN  
    INSERT INTO ArticleKeyPhrases (ArticleUrl, KeyPhrase)  
    SELECT  
        @ArticleUrl,  
        [value]  
    FROM  
        OPENJSON(@KeyPhrasesJson)  
END
```

```
CREATE PROCEDURE sp_InsertNewsAnalysis  
    @ArticleUrl NVARCHAR(450),  
    @Title NVARCHAR(MAX),  
    @PublishedDate DATETIME2,  
    @Sentiment NVARCHAR(50),  
    @PositiveScore FLOAT,  
    @NegativeScore FLOAT,  
    @NeutralScore FLOAT  
AS  
BEGIN
```

-- This MERGE statement is the same logic as your script

MERGE NewsAnalysis AS target

USING (SELECT

 @ArticleUrl AS ArticleUrl, @Title AS Title, @PublishedDate AS PublishedDate,
 @Sentiment AS Sentiment, @PositiveScore AS PositiveScore,
 @NegativeScore AS NegativeScore, @NeutralScore AS NeutralScore

) AS source

 ON (target.ArticleUrl = source.ArticleUrl)

 WHEN NOT MATCHED THEN

 INSERT (ArticleUrl, Title, PublishedDate, Sentiment, PositiveScore, NegativeScore,
 NeutralScore)

 VALUES (source.ArticleUrl, source.Title, source.PublishedDate, source.Sentiment,
 source.PositiveScore, source.NegativeScore, source.NeutralScore);

 END

Web activity URL-

<https://newssentimentai-yourinitials.cognitiveservices.azure.com/.>

1. For Sentiment Analysis (Web1)

This URL points to the sentiment analysis tool.

<https://newssentimentai-yourinitials.cognitiveservices.azure.com/text/analytics/v3.1/sentiment>

2. For Named Entity Recognition (Web_Entities)

This URL points to the tool that finds organizations, locations, and products.

<https://newssentimentai-yourinitials.cognitiveservices.azure.com/text/analytics/v3.1/entities/recognition/general>

3. For Key Phrase Extraction (Web_KeyPhrases)

This URL points to the tool that finds the main topics in the text.

<https://newssentimentai-yourinitials.cognitiveservices.azure.com/text/analytics/v3.1/keyPhrases>

Body-

{"documents": [{"id": "1", "language": "en", "text": "@{item().description}"}]}

Header-

Ocp-Apim-Subscription-Key :

<input type="checkbox"/>	Name	Type *	Value
<input type="checkbox"/>	ArticleUrl	String	@item().url
<input type="checkbox"/>	NegativeScore	Double	@activity('Web1').output.documents[...]
<input type="checkbox"/>	NeutralScore	Double	@activity('Web1').output.documents[...]
<input type="checkbox"/>	PositiveScore	Double	@activity('Web1').output.documents[...]
<input type="checkbox"/>	PublishedDate	DateTime	@item().date
<input type="checkbox"/>	Sentiment	String	@activity('Web1').output.documents[...]
<input type="checkbox"/>	Title	String	@replace(item().title, '!', '')

```

@item().url
@activity('Web1').output.documents[0].confidenceScores.negative

@activity('Web1').output.documents[0].confidenceScores.neutral

@activity('Web1').output.documents[0].confidenceScores.positive

@item().date

@activity('Web1').output.documents[0].sentiment

@replace(item().title, '!', '')

```

Storedprocedure 2-

<input type="checkbox"/>	Name	Type *	Value
<input type="checkbox"/>	ArticleUrl	String	@item().url
<input type="checkbox"/>	EntitiesJson	String	@string(activity('Web_Entities').outp...

```

@string(activity('Web_Entities').output.documents[0].entities)

```

	Name	Type *	Value
<input type="checkbox"/>	ArticleUrl	String	@item().url
<input type="checkbox"/>	KeyPhrasesJson	String	@string(activity('Web_KeyPhrases').o...)

```
@string(activity('Web_KeyPhrases').output.documents[0].keyPhrases)
```