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1 # [Day-12 2211cs020206]Write a python script to generate a Wordcloud from a text:'data science machine learning artificial intelligence'.Save the wordcloud as an image
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In [1]:

```
1 !pip install wordcloud
2 !pip install matplotlib
```

Collecting wordcloud

Downloading wordcloud-1.9.4-cp39-cp39-win_amd64.whl (300 kB)

----- 300.4/300.4 kB 4.6 MB/s eta 0:

00:00

Requirement already satisfied: pillow in c:\users\nihar\anaconda3\lib\site-packages (from wordcloud) (9.2.0)

Requirement already satisfied: numpy>=1.6.1 in c:\users\nihar\anaconda3\lib\site-packages (from wordcloud) (1.24.4)

Requirement already satisfied: matplotlib in c:\users\nihar\anaconda3\lib\site-packages (from wordcloud) (3.5.2)

Requirement already satisfied: python-dateutil>=2.7 in c:\users\nihar\anaconda3\lib\site-packages (from matplotlib->wordcloud) (2.8.2)

Requirement already satisfied: kiwisolver>=1.0.1 in c:\users\nihar\anaconda3\lib\site-packages (from matplotlib->wordcloud) (1.4.2)

Requirement already satisfied: pyparsing>=2.2.1 in c:\users\nihar\anaconda3\lib\site-packages (from matplotlib->wordcloud) (3.0.9)

Requirement already satisfied: fonttools>=4.22.0 in c:\users\nihar\anaconda3\lib\site-packages (from matplotlib->wordcloud) (4.25.0)

Requirement already satisfied: packaging>=20.0 in c:\users\nihar\anaconda3\lib\site-packages (from matplotlib->wordcloud) (21.3)

Requirement already satisfied: cycler>=0.10 in c:\users\nihar\anaconda3\lib\site-packages (from matplotlib->wordcloud) (0.11.0)

Requirement already satisfied: six>=1.5 in c:\users\nihar\anaconda3\lib\site-packages (from python-dateutil>=2.7->matplotlib->wordcloud) (1.16.0)

Installing collected packages: wordcloud

Successfully installed wordcloud-1.9.4

Requirement already satisfied: matplotlib in c:\users\nihar\anaconda3\lib\site-packages (3.5.2)

Requirement already satisfied: pillow>=6.2.0 in c:\users\nihar\anaconda3\lib\site-packages (from matplotlib) (9.2.0)

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Requirement already satisfied: numpy>=1.17 in c:\users\nihar\anaconda3\lib\site-packages (from matplotlib) (1.24.4)

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Requirement already satisfied: six>=1.5 in c:\users\nihar\anaconda3\lib\site-packages (from python-dateutil>=2.7->matplotlib) (1.16.0)

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In [2]: 1 from wordcloud import WordCloud
2 import matplotlib.pyplot as plt
3 def generate_wordcloud(text, output_image):
4     """
5     Generate a WordCloud from the given text and save it as an image.
6
7     Args:
8         text (str): The input text for the WordCloud.
9         output_image (str): The file path to save the WordCloud image.
10    """
11    wordcloud = WordCloud(width=1200, height=400, background_color='white')
12    plt.figure(figsize=(10, 5))
13    plt.imshow(wordcloud, interpolation='bilinear')
14    plt.axis('off')
15    wordcloud.to_file(output_image)
16    text = 'data science machine learning artificial intelligence'
17    output_image = 'wordcloud.png'
18    generate_wordcloud(text, output_image)
19    print(f"WordCloud saved as {output_image}")
```

WordCloud saved as wordcloud.png



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In [ ]: 1
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