16. Scenario: You are working on a project that involves analyzing customer reviews for a product.

You have a dataset containing customer reviews, and your task is to develop a Python program that

calculates the frequency distribution of words in the reviews.

Question: Develop a Python program to calculate the frequency distribution of words in the

customer reviews dataset?

Code:

#16

import pandas as pd

from collections import Counter

import re

df = pd.read\_excel(r"C:\Users\hares\Downloads\q16\_05.xlsx")

all\_reviews = " ".join(df['Review\_Text'].astype(str))

cleaned\_text = re.sub(r'[^a-z\s]', '', all\_reviews.lower())

words = cleaned\_text.split()

word\_freq = Counter(words)

print("Most Common Words in Reviews:")

for word, freq in word\_freq.most\_common(10):

print(f"{word}: {freq}")

output:

Most Common Words in Reviews:

not: 2

the: 2

bad: 2

quality: 2

great: 1

product: 1

really: 1

loved: 1

it: 1

worth: 1

dataset :

|  |  |
| --- | --- |
| **Review\_ID** | **Review\_Text** |
| 1 | Great product! Really loved it. |
| 2 | Not worth the price. Bad quality. |
| 3 | Amazing quality and excellent support. |
| 4 | Would not recommend. Very bad. |
| 5 | Totally satisfied with the purchase. |