!pip install --upgrade diffusers transformers -q

from pathlib import Path

import tqdm

import torch

import pandas as pd

import numpy as np

from diffusers import StableDiffusionPipeline

from transformers import pipeline, set\_seed

import matplotlib.pyplot as plt

import cv2

class CFG:

device = "cuda"

seed = 42

generator = torch.Generator(device).manual\_seed(seed)

image\_gen\_steps = 35

image\_gen\_model\_id = "stabilityai/stable-diffusion-2"

image\_gen\_size = (400,400)

image\_gen\_guidance\_scale = 9

prompt\_gen\_model\_id = "gpt2"

prompt\_dataset\_size = 6

prompt\_max\_length = 12

pip install accelerate

image\_gen\_model = StableDiffusionPipeline.from\_pretrained(

CFG.image\_gen\_model\_id, torch\_dtype=torch.float16,

revision="fp16", use\_auth\_token='your\_hugging\_face\_auth\_token', guidance\_scale=9

)

image\_gen\_model = image\_gen\_model.to(CFG.device)

def generate\_image(prompt, model):

image = model(

prompt, num\_inference\_steps=CFG.image\_gen\_steps,

generator=CFG.generator,

guidance\_scale=CFG.image\_gen\_guidance\_scale

).images[0]

image = image.resize(CFG.image\_gen\_size)

return image

generate\_image("Red Rose", image\_gen\_model)

A close-up of a rose

Description automatically generatedA screenshot of a computer

Description automatically generated