```
!pip install diffusers
```

```
Collecting diffusers
    Downloading diffusers-0.29.2-py3-none-any.whl.metadata (19 kB)
  Requirement already satisfied: importlib-metadata in /usr/local/lib/python3.10/dist-packages (from diffusers) (8.1.0)
  Requirement already satisfied: filelock in /usr/local/lib/python3.10/dist-packages (from diffusers) (3.15.4)
  Requirement already satisfied: huggingface-hub>=0.23.2 in /usr/local/lib/python3.10/dist-packages (from diffusers) (0.23.5)
  Requirement already satisfied: numpy in /usr/local/lib/python3.10/dist-packages (from diffusers) (1.25.2)
  Requirement already satisfied: regex!=2019.12.17 in /usr/local/lib/python3.10/dist-packages (from diffusers) (2024.5.15)
  Requirement already satisfied: requests in /usr/local/lib/python3.10/dist-packages (from diffusers) (2.31.0)
  Requirement already satisfied: safetensors>=0.3.1 in /usr/local/lib/python3.10/dist-packages (from diffusers) (0.4.3)
  Requirement already satisfied: Pillow in /usr/local/lib/python3.10/dist-packages (from diffusers) (9.4.0)
  Requirement already satisfied: fsspec>=2023.5.0 in /usr/local/lib/python3.10/dist-packages (from huggingface-hub>=0.23.2->diffusers) (20
  Requirement already satisfied: packaging>=20.9 in /usr/local/lib/python3.10/dist-packages (from huggingface-hub>=0.23.2->diffusers) (24.
  Requirement already satisfied: pyyaml>=5.1 in /usr/local/lib/python3.10/dist-packages (from huggingface-hub>=0.23.2->diffusers) (6.0.1)
  Requirement already satisfied: tqdm>=4.42.1 in /usr/local/lib/python3.10/dist-packages (from huggingface-hub>=0.23.2->diffusers) (4.66.4
  Requirement already satisfied: typing-extensions>=3.7.4.3 in /usr/local/lib/python3.10/dist-packages (from huggingface-hub>=0.23.2->diff
  Requirement already satisfied: zipp>=0.5 in /usr/local/lib/python3.10/dist-packages (from importlib-metadata->diffusers) (3.19.2)
  Requirement already satisfied: charset-normalizer<4,>=2 in /usr/local/lib/python3.10/dist-packages (from requests->diffusers) (3.3.2)
  Requirement already satisfied: idna<4,>=2.5 in /usr/local/lib/python3.10/dist-packages (from requests->diffusers) (3.7)
  Requirement already satisfied: urllib3<3,>=1.21.1 in /usr/local/lib/python3.10/dist-packages (from requests->diffusers) (2.0.7)
  Requirement already satisfied: certifi>=2017.4.17 in /usr/local/lib/python3.10/dist-packages (from requests->diffusers) (2024.7.4)
  Downloading diffusers-0.29.2-py3-none-any.whl (2.2 MB)
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  Installing collected packages: diffusers
  Successfully installed diffusers-0.29.2
```

```python
from PIL import Image
from diffusers import StableDiffusionPipeline
import torch

# Loading th model
original_image = Image.open("/content/assignment.jpg")

# new size (1280x1280) by adding 128 pixels on each side
new_size = (original_image.width + 256, original_image.height + 256)

# Create a new blank canvas
new_canvas = Image.new("RGB", new_size, (255, 255, 255))

# Pasting the original image
new_canvas.paste(original_image, (128, 128))

# Loading the Stable Diffusion pipeline
pipe = StableDiffusionPipeline.from_pretrained("runwayml/stable-diffusion-v1-5", torch_dtype=torch.float16).to("cuda")

# Prompt giving
prompt = "A young boy with brown hair and a jacket is at the helm of a ship, pointing towards a whimsical island that floats in the sky. The

# Generating the outpainted image
outpainted_image = pipe(prompt=prompt, image=new_canvas, num_inference_steps=100,guidance_scale=13).images[0]

# Saving the outpainted image
outpainted_image.save("outpainted_image.png")
```

```
Loading pipeline components...: 100%                                    7/7 [00:20<00:00,  3.69s/it]

100%                                  100/100 [00:14<00:00,  6.77it/s]
```