```
!pip install opencv-python rembg==2.0.66 onnxruntime
```

```
Requirement already satisfied: opencv-python in /usr/local/lib/python3.11/dist-packages (4.11.0.86)
Collecting rembg==2.0.66
  Downloading rembg-2.0.66-py3-none-any.whl.metadata (21 kB)
Collecting onnxruntime
  Downloading onnxruntime-1.22.0-cp311-cp311-manylinux_2_27_x86_64.manylinux_2_28_x86_64.whl.metadata (4.5 kB)
Requirement already satisfied: jsonschema in /usr/local/lib/python3.11/dist-packages (from rembg==2.0.66) (4.23.0)
Requirement already satisfied: numpy in /usr/local/lib/python3.11/dist-packages (from rembg==2.0.66) (2.0.2)
Requirement already satisfied: opencv-python-headless in /usr/local/lib/python3.11/dist-packages (from rembg==2.0.66) (4.11.0.86)
Requirement already satisfied: pillow in /usr/local/lib/python3.11/dist-packages (from rembg==2.0.66) (11.2.1)
Requirement already satisfied: pooch in /usr/local/lib/python3.11/dist-packages (from rembg==2.0.66) (1.8.2)
Collecting pymatting (from rembg==2.0.66)
  Downloading pymatting-1.1.14-py3-none-any.whl.metadata (7.7 kB)
Requirement already satisfied: scikit-image in /usr/local/lib/python3.11/dist-packages (from rembg==2.0.66) (0.25.2)
Requirement already satisfied: scipy in /usr/local/lib/python3.11/dist-packages (from rembg==2.0.66) (1.15.3)
Requirement already satisfied: tqdm in /usr/local/lib/python3.11/dist-packages (from rembg==2.0.66) (4.67.1)
Collecting coloredlogs (from onnxruntime)
  Downloading coloredlogs-15.0.1-py2.py3-none-any.whl.metadata (12 kB)
Requirement already satisfied: flatbuffers in /usr/local/lib/python3.11/dist-packages (from onnxruntime) (25.2.10)
Requirement already satisfied: packaging in /usr/local/lib/python3.11/dist-packages (from onnxruntime) (24.2)
Requirement already satisfied: protobuf in /usr/local/lib/python3.11/dist-packages (from onnxruntime) (5.29.4)
Requirement already satisfied: sympy in /usr/local/lib/python3.11/dist-packages (from onnxruntime) (1.13.1)
Collecting humanfriendly>=9.1 (from coloredlogs->onnxruntime)
  Downloading humanfriendly-10.0-py2.py3-none-any.whl.metadata (9.2 kB)
Requirement already satisfied: attrs>=22.2.0 in /usr/local/lib/python3.11/dist-packages (from jsonschema->rembg==2.0.66) (25.3.0)
Requirement already satisfied: jsonschema-specifications>=2023.03.6 in /usr/local/lib/python3.11/dist-packages (from jsonschema->rembg==
Requirement already satisfied: referencing>=0.28.4 in /usr/local/lib/python3.11/dist-packages (from jsonschema->rembg==2.0.66) (0.36.2)
Requirement already satisfied: rpds-py>=0.7.1 in /usr/local/lib/python3.11/dist-packages (from jsonschema->rembg==2.0.66) (0.24.0)
Requirement already satisfied: platformdirs>=2.5.0 in /usr/local/lib/python3.11/dist-packages (from pooch->rembg==2.0.66) (4.3.8)
Requirement already satisfied: requests>=2.19.0 in /usr/local/lib/python3.11/dist-packages (from pooch->rembg==2.0.66) (2.32.3)
Requirement already satisfied: numba!=0.49.0 in /usr/local/lib/python3.11/dist-packages (from pymatting->rembg==2.0.66) (0.60.0)
Requirement already satisfied: networkx>=3.0 in /usr/local/lib/python3.11/dist-packages (from scikit-image->rembg==2.0.66) (3.4.2)
Requirement already satisfied: imageio!=2.35.0,>=2.33 in /usr/local/lib/python3.11/dist-packages (from scikit-image->rembg==2.0.66) (2.3
Requirement already satisfied: tifffile>=2022.8.12 in /usr/local/lib/python3.11/dist-packages (from scikit-image->rembg==2.0.66) (2025.5
Requirement already satisfied: lazy-loader>=0.4 in /usr/local/lib/python3.11/dist-packages (from scikit-image->rembg==2.0.66) (0.4)
Requirement already satisfied: mpmath<1.4,>=1.1.0 in /usr/local/lib/python3.11/dist-packages (from sympy->onnxruntime) (1.3.0)
Requirement already satisfied: llvmlite<0.44,>=0.43.0dev0 in /usr/local/lib/python3.11/dist-packages (from numba!=0.49.0->pymatting->rem
Requirement already satisfied: typing-extensions>=4.4.0 in /usr/local/lib/python3.11/dist-packages (from referencing>=0.28.4->jsonschema
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Requirement already satisfied: idna<4,>=2.5 in /usr/local/lib/python3.11/dist-packages (from requests>=2.19.0->pooch->rembg==2.0.66) (3.
Requirement already satisfied: urllib3<3,>=1.21.1 in /usr/local/lib/python3.11/dist-packages (from requests>=2.19.0->pooch->rembg==2.0.6
Requirement already satisfied: certifi>=2017.4.17 in /usr/local/lib/python3.11/dist-packages (from requests>=2.19.0->pooch->rembg==2.0.6
Downloading rembg-2.0.66-py3-none-any.whl (41 kB)
 ──────────────────────────────────────── 41.7/41.7 kB 1.2 MB/s eta 0:00:00
Downloading onnxruntime-1.22.0-cp311-cp311-manylinux_2_27_x86_64.manylinux_2_28_x86_64.whl (16.4 MB)
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Downloading coloredlogs-15.0.1-py2.py3-none-any.whl (46 kB)
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Downloading pymatting-1.1.14-py3-none-any.whl (54 kB)
 ──────────────────────────────────────── 54.7/54.7 kB 3.0 MB/s eta 0:00:00
Downloading humanfriendly-10.0-py2.py3-none-any.whl (86 kB)
 ──────────────────────────────────────── 86.8/86.8 kB 4.8 MB/s eta 0:00:00
Installing collected packages: humanfriendly, pymatting, coloredlogs, onnxruntime, rembg
Successfully installed coloredlogs-15.0.1 humanfriendly-10.0 onnxruntime-1.22.0 pymatting-1.1.14 rembg-2.0.66
```

+ Code   + Text

```
import rembg
import cv2
import numpy as np
from rembg import remove
from google.colab import files
from google.colab.patches import cv2_imshow
from PIL import Image
import io
```

```
uploaded = files.upload()
```

```
Choose Files  pen 4.jpg
  • pen 4.jpg(image/jpeg) - 4972 bytes, last modified: 5/19/2025 - 100% done
Saving pen 4.jpg to pen 4.jpg
```

✏ Generate   print hello world using rot13   🔍   Close

```
for filename in uploaded.keys():

with open(img_filename, "rb") as f:
    input_bytes = f.read()
```

```
output_bytes = remove(input_bytes)
```

```
output_image = Image.open(io.BytesIO(output_bytes)).convert("RGBA")
output_np = np.array(output_image)
```

```
output_np_bgra = cv2.cvtColor(output_np, cv2.COLOR_RGBA2BGRA)
```

```
cv2_imshow(output_np_bgra)
```


Start coding or generate with AI.