

1. Python program to add two numbers

```
num1 = 6
num2 = 10
sum = num1 + num2
print(sum)
```

→ 16

2. Python program to take user input and add two numbers

```
num1 = int(input("Enter the first number: "))
num2 = int(input("Enter the second number: "))
sum = num1 + num2
print(sum)
```

→ Enter the first number: 3
 Enter the second number: 5
 8

3. Python program to implement simple calculator

```
num1 = int(input("Enter the first number: "))
num2 = int(input("Enter the second number: "))
print("sum: ", num1+num2)
print("subtraction: ", num1-num2)
print("multiplication: ", num1*num2)
print("division: ", num1/num2)
```

→ Enter the first number: 5
 Enter the second number: 8
 sum: 13
 subtraction: -3
 multiplication: 40
 division: 0.625

4. Python program to enter a word and check its palindrome

```
num1 = input("Enter the word: ")
if num1 == num1[::-1]:
    print("palindrome")
else:
    print("not palindrome")
```

→ Enter the word: claydon
 not palindrome

5. Python program to upload image and perform different task

```
from PIL import Image, ImageFilter
import io
from IPython.display import display
import ipywidgets as widgets

uploaded = widgets.FileUpload(accept='image/*', multiple=False)
display(uploaded)

def process_image(change):
    if uploaded.value:
        image_filename = next(iter(uploaded.value))
        image_bytes = uploaded.value[image_filename]['content']
```

```
img = Image.open(io.BytesIO(image_bytes))

img_gray = img.convert('L')
print("Grayscale image:")
display(img_gray)

img_blur = img.filter(ImageFilter.GaussianBlur(5))
print("Blurred image:")
display(img_blur)

img_rotated = img.rotate(90, expand=True)
print("Rotated image (90 degrees clockwise):")
display(img_rotated)
else:
    print("No image was uploaded.")

uploaded.observe(process_image, names='value')
```

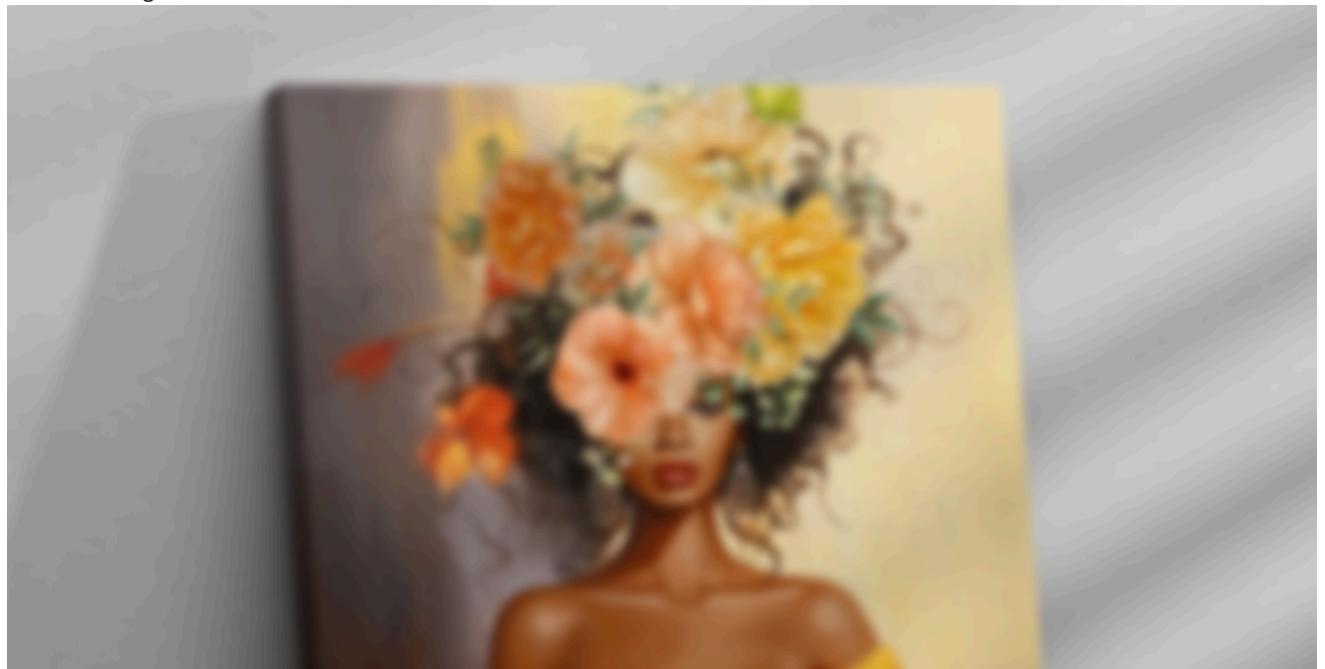


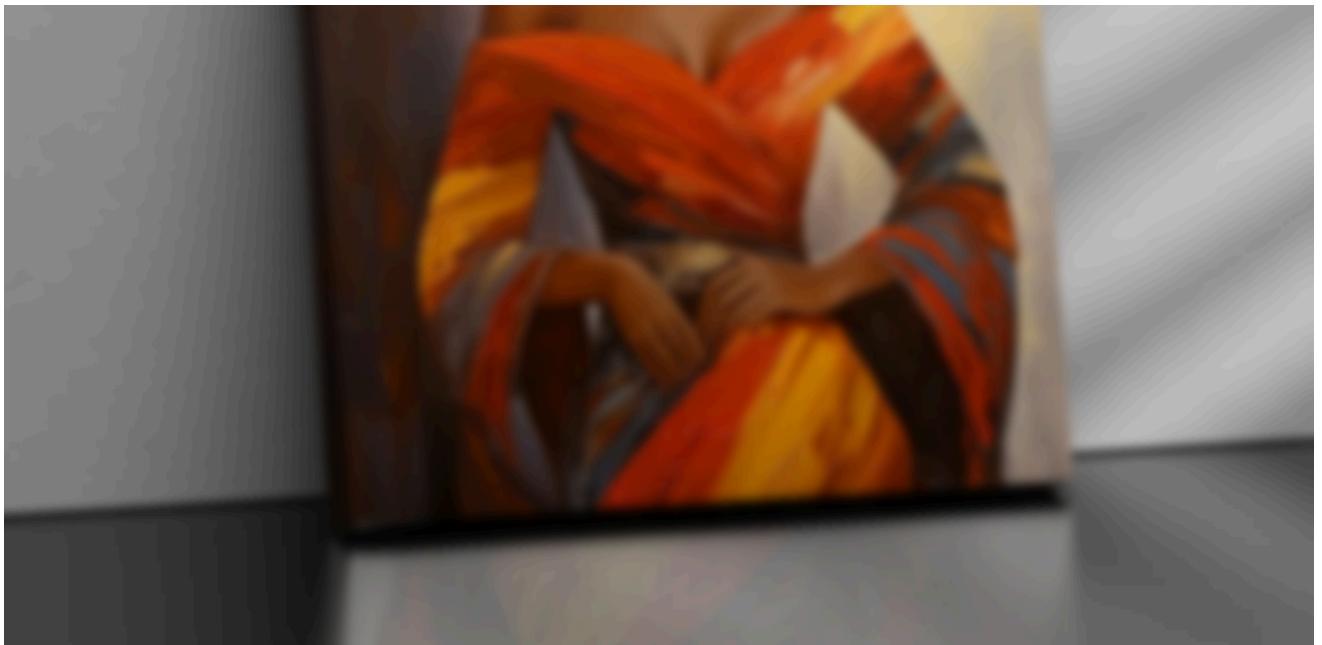
Upload (1)

Grayscale image:



Blurred image:





Rotated image (90 degrees clockwise):



6.Python program for handling video files

```
from google.colab import files
import cv2

# Upload video file
uploaded_video = files.upload()

if uploaded_video:
    video_filename = next(iter(uploaded_video))

    # Save uploaded bytes to disk
    with open(video_filename, 'wb') as f:
        f.write(next(uploaded_video[video_filename]))
```