

11 question

```
import cv2
```

```
# Step 1: Read the image
```

```
image_path = r"C:\Users\SAIL\Downloads\CV\mouse.jpg" # Replace with your image path
```

```
image = cv2.imread(image_path)
```

```
# Check if the image is loaded successfully
```

```
if image is None:
```

```
    print("Error: Could not load image.")
```

```
    exit()
```

```
# Step 2: Perform 180-degree rotation by flipping the image horizontally and vertically
```

```
rotated_image = cv2.flip(image, -1) # -1 flips both horizontally and vertically
```

```
# Step 3: Display the original and rotated images
```

```
cv2.imshow("Original Image", image)
```

```
cv2.imshow("180-degree Rotated Image (Clockwise along Y-axis)", rotated_image)
```

```
# Wait for a key press and close all windows
```

```
cv2.waitKey(0)
```

```
cv2.destroyAllWindows()
```

