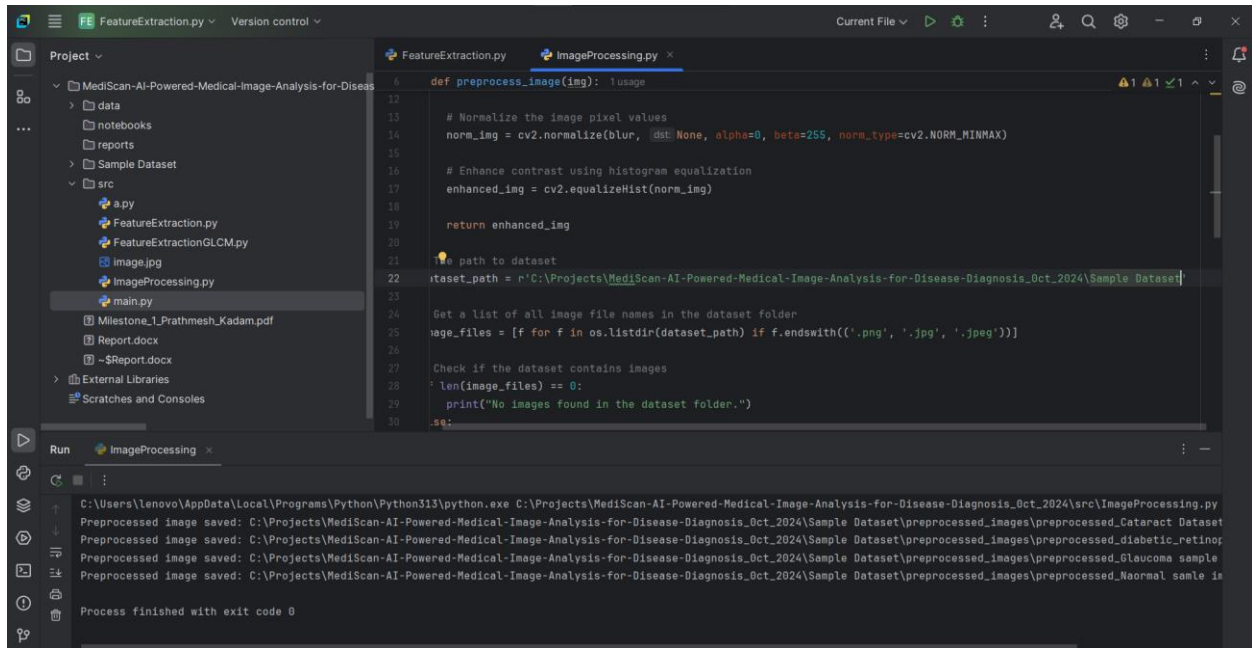


Preprocessing Stage: -



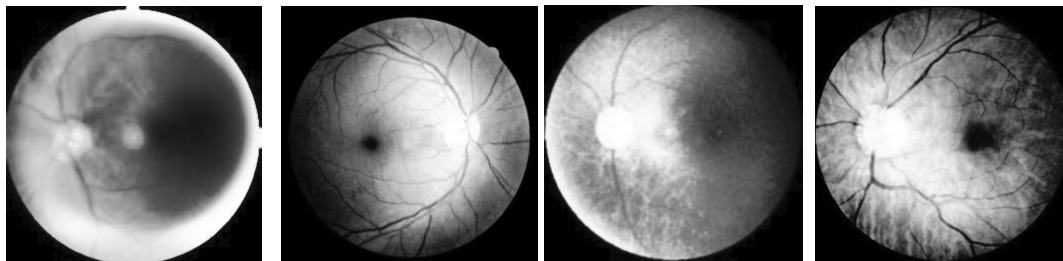
```
def preprocess_image(img):  
    # Normalize the image pixel values  
    norm_img = cv2.normalize(blur, dst=None, alpha=0, beta=255, norm_type=cv2.NORM_MINMAX)  
    # Enhance contrast using histogram equalization  
    enhanced_img = cv2.equalizeHist(norm_img)  
    return enhanced_img  
  
# path to dataset  
dataset_path = r'C:\Projects\MediScan-AI-Powered-Medical-Image-Analysis-for-Disease-Diagnosis_Oct_2024\Sample Dataset'  
# Get a list of all image file names in the dataset folder  
image_files = [f for f in os.listdir(dataset_path) if f.endswith((''.png', '.jpg', '.jpeg'))]  
# Check if the dataset contains images  
if len(image_files) == 0:  
    print("No images found in the dataset folder.")  
else:  
    # Process each image  
    for image_file in image_files:  
        image_path = os.path.join(dataset_path, image_file)  
        img = cv2.imread(image_path)  
        preprocessed_img = preprocess_image(img)  
        # Save the preprocessed image  
        preprocessed_image_path = os.path.join(preprocessed_images_path, image_file)  
        cv2.imwrite(preprocessed_image_path, preprocessed_img)  
        print(f"Preprocessed image saved: {preprocessed_image_path}")
```

Run ImageProcessing
C:\Users\lenovo\AppData\Local\Programs\Python\Python313\python.exe C:\Projects\MediScan-AI-Powered-Medical-Image-Analysis-for-Disease-Diagnosis_Oct_2024\src\ImageProcessing.py
Preprocessed image saved: C:\Projects\MediScan-AI-Powered-Medical-Image-Analysis-for-Disease-Diagnosis_Oct_2024\Sample Dataset\preprocessed_images\preprocessed_Cataract Dataset
Preprocessed image saved: C:\Projects\MediScan-AI-Powered-Medical-Image-Analysis-for-Disease-Diagnosis_Oct_2024\Sample Dataset\preprocessed_images\preprocessed_Diabetic Retinop
Preprocessed image saved: C:\Projects\MediScan-AI-Powered-Medical-Image-Analysis-for-Disease-Diagnosis_Oct_2024\Sample Dataset\preprocessed_images\preprocessed_Glaucoma sample
Preprocessed image saved: C:\Projects\MediScan-AI-Powered-Medical-Image-Analysis-for-Disease-Diagnosis_Oct_2024\Sample Dataset\preprocessed_images\preprocessed_Naormal samle is
Process finished with exit code 0

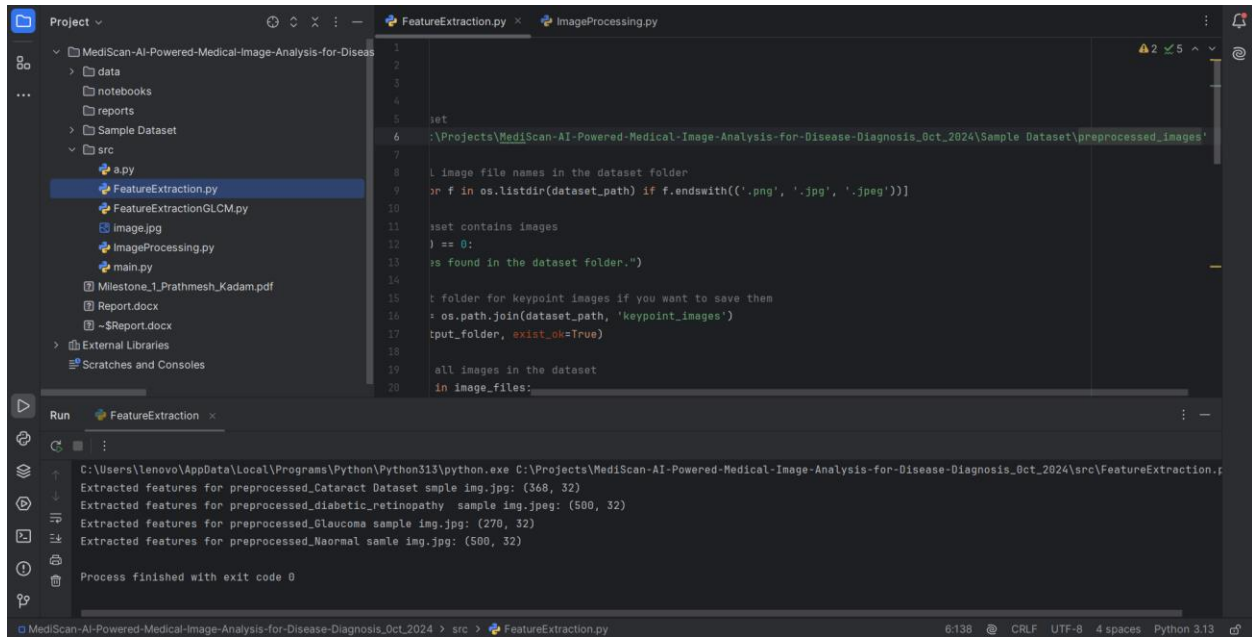
Images: -



Preprocessed Images: -



Feature Extraction: -



The screenshot displays a code editor with a project named "MediScan-AI-Powered-Medical-Image-Analysis-for-Disease-Diagnosis_Oct_2024". The file explorer on the left shows the project structure, including a "src" directory with files like "FeatureExtraction.py", "FeatureExtractionGLCM.py", "Image.jpg", "ImageProcessing.py", and "main.py". The main editor window shows the code for "FeatureExtraction.py". The code defines a dataset path, lists image files, and extracts features for three specific images: "preprocessed_Cataract Dataset smple img.jpg", "preprocessed_diabetic_retinopathy sample img.jpeg", and "preprocessed_Glaucoma sample img.jpg". The output console at the bottom shows the execution results, including the extracted features for each image and the final exit code 0.

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Preprocessed Images: -



Keypoint Images: -

