



Centurion  
UNIVERSITY  
*Shaping Lives...  
Empowering Communities...*

School: ..... Campus: .....

Academic Year: ..... Subject Name: ..... Subject Code: .....

Semester: ..... Program: ..... Branch: ..... Specialization: .....

Date: .....

## Applied and Action Learning

(Learning by Doing and Discovery)

Name of the Experiment :

### \* Coding Phase: Pseudo Code / Flow Chart / Algorithm

```
import cv2
import numpy as np
import matplotlib.pyplot as plt
import os
img_path = os.path.join(os.getcwd(), 'contents', 'Sample-Image.jpg')
img = cv2.imread(img_path)

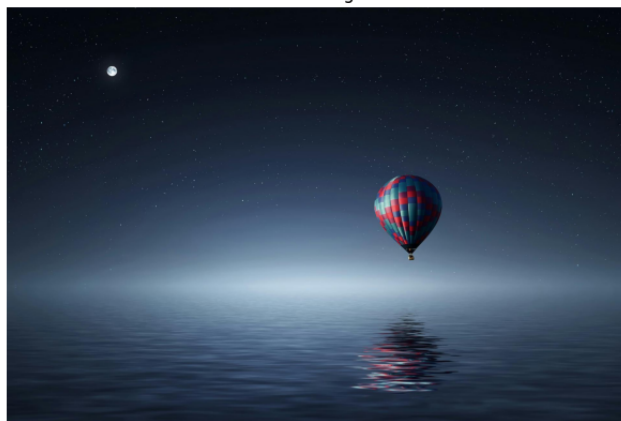
if img is None:
    print(f"Error: Could not load image from {img_path}")
    print("Please check if the file exists and the path is correct.")
else:
    # converting to RGB
    img_rgb, img_gray = cv2.cvtColor(img, cv2.COLOR_BGR2RGB), cv2.cvtColor(img,
cv2.COLOR_BGR2GRAY)

    plt.figure(figsize=(12,5))
    plt.subplot(1, 2, 1)
    plt.imshow(img_rgb)
    plt.axis('off')
    plt.title('RGB Image')

    plt.subplot(1, 2, 2)
    plt.imshow(img_gray, cmap='gray')
    plt.axis('off')
    plt.title('Grayscale Image')
    plt.tight_layout()
    plt.show()
```

### \* Implementation Phase: Final Output (no error)

RGB Image



Grayscale Image



## ASSESSMENT

Rubrics	Full Mark	Marks Obtained	Remarks
Concept	10		
Planning and Execution/ Practical Simulation/ Programming	10		
Result and Interpretation	10		
Record of Applied and Action Learning	10		
Viva	10		
<b>Total</b>	<b>50</b>		

**Signature of the Student:**

Name :

Regn. No. :

**Signature of the Faculty:**

Page No.....

*\*As applicable according to the experiment. Two sheets per experiment (10-20) to be used.*