

## **ASSIGNMENT 7:**

### **Problem statement:**

1. Swap phase of the dog image and magnitude of the Lena image and display the output.
2. Swap phase of the Lena image and magnitude of the dog image and display the output

Solve 1 & 2 using built-in function (4 marks) and user defined function (6 marks).

### **Note:**

- a. Write a function to implement FFT for 1D signal.
- b. Implement DFT function for an image using the “FFT for 1D” signal( derived in a)
- c. Consider the images of Lena and dog images attached. Find phase and magnitude of the dog and Lena images using the DFT function (in b).