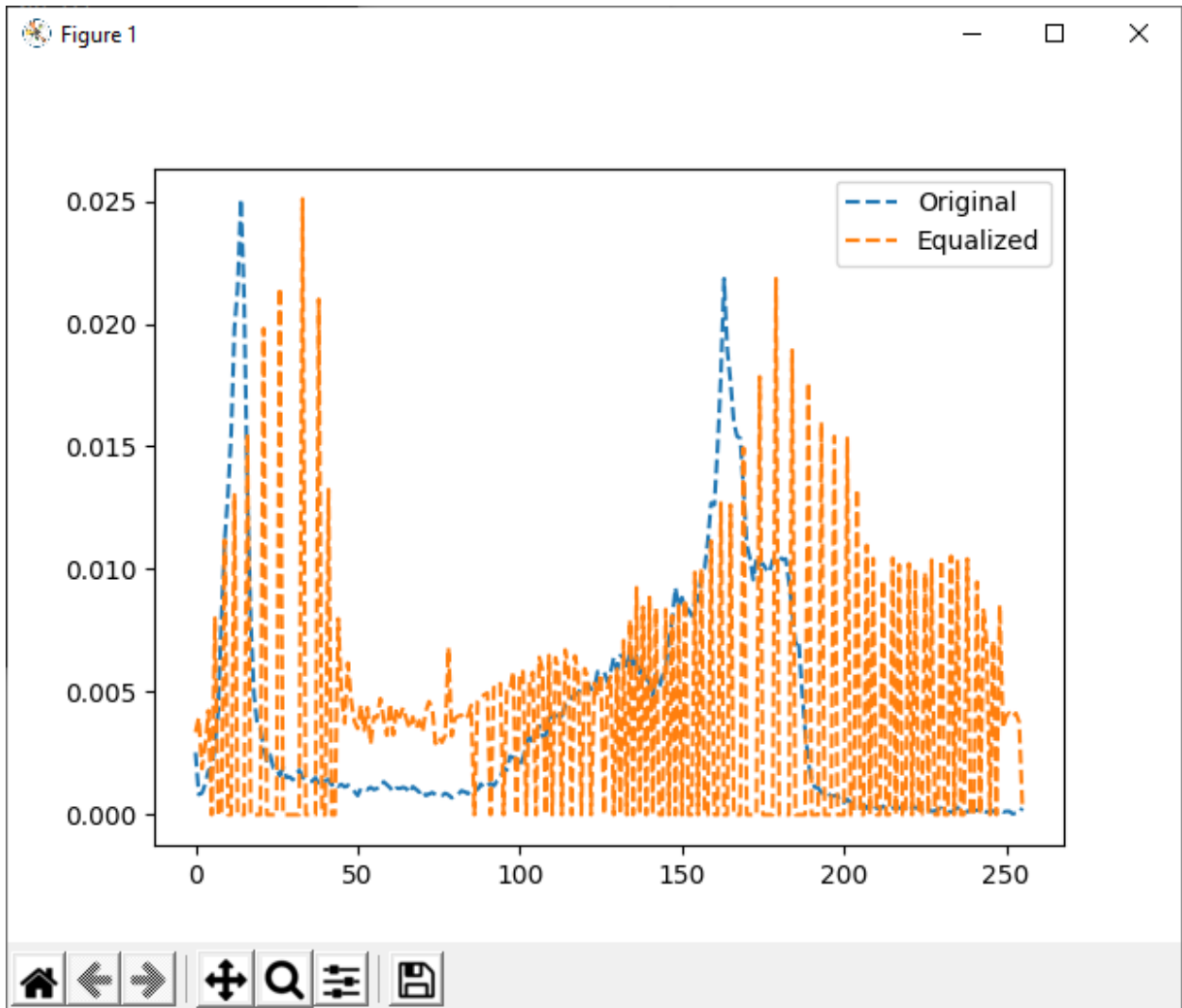
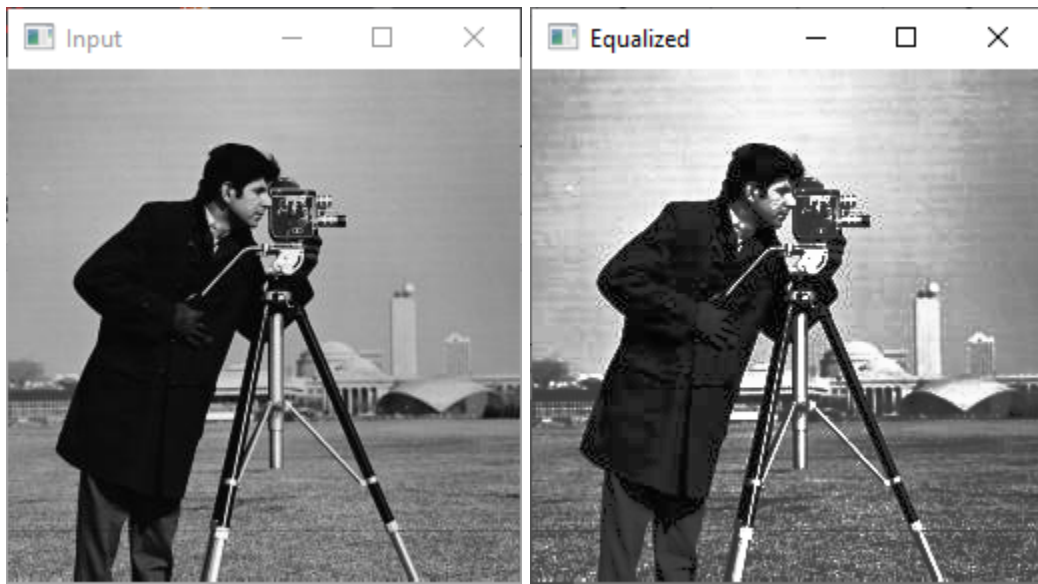


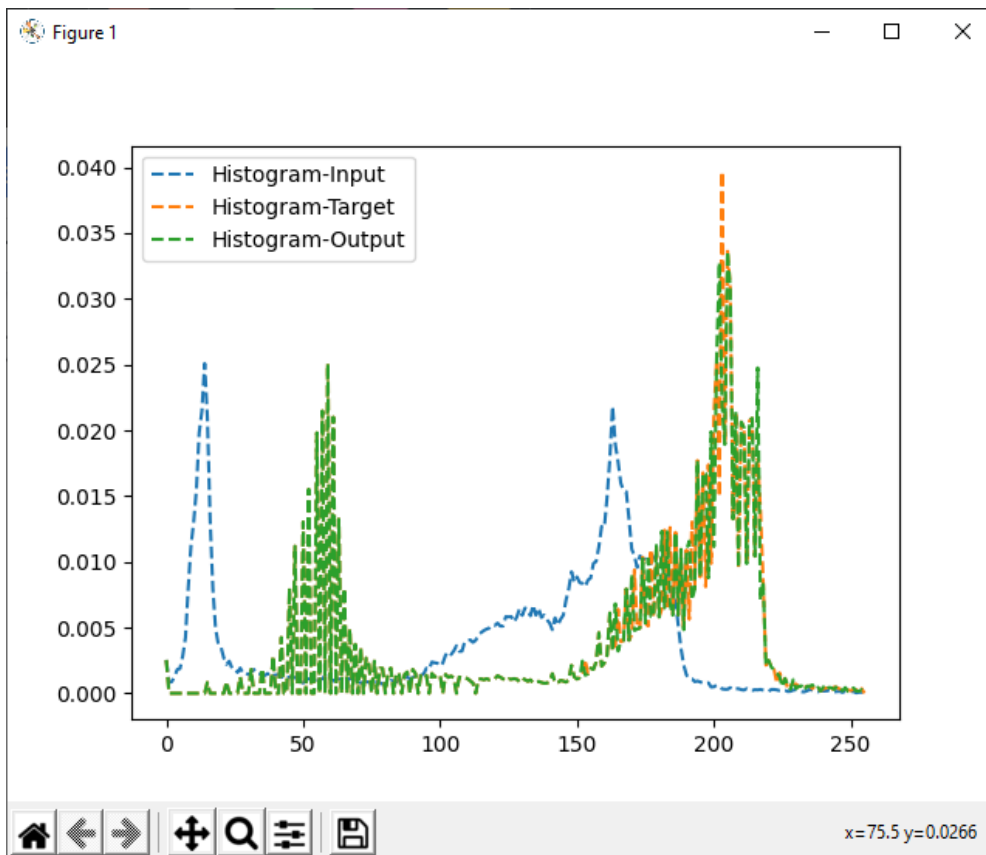
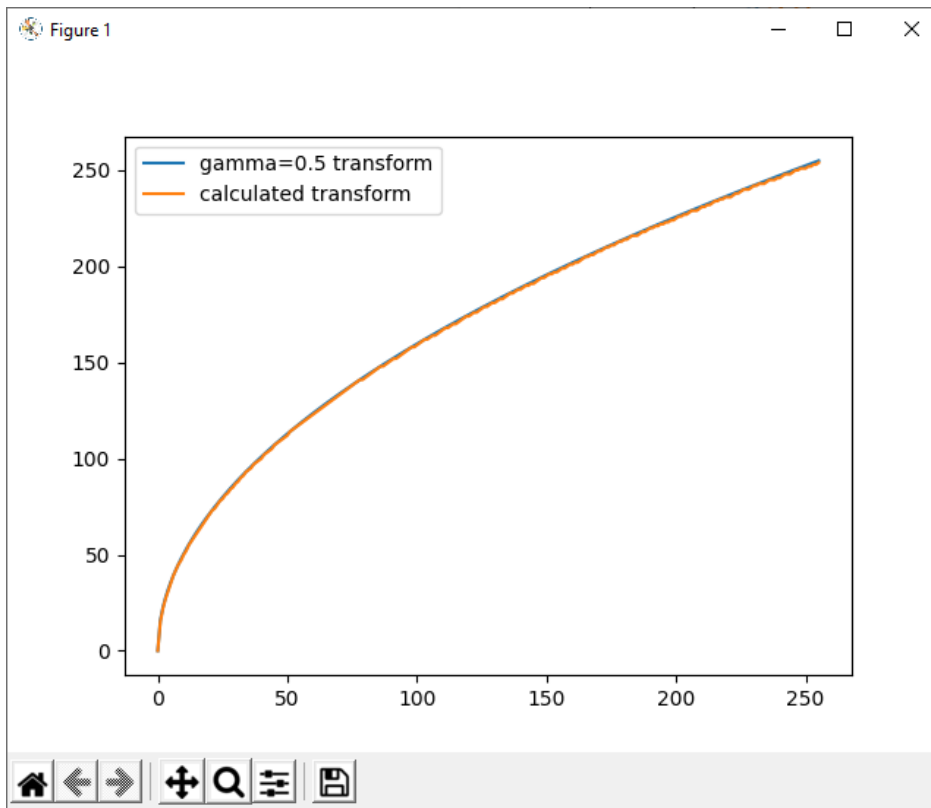
## DIP ASSIGNMENT 2

Q3



## DIP ASSIGNMENT 2

Q4



## DIP ASSIGNMENT 2



**Q5**

**Input (3, 3)**

```
[[0 0 0]
 [0 1 0]
 [0 0 0]]
```

**Padded-Input (7, 7)**

```
[[0 0 0 0 0 0 0]
 [0 0 0 0 0 0 0]]
```

## DIP ASSIGNMENT 2

```
[0 0 0 0 0 0 0]
[0 0 0 1 0 0 0]
[0 0 0 0 0 0 0]
[0 0 0 0 0 0 0]
[0 0 0 0 0 0 0]]
```

Input-Filter (3, 3)

```
[[1 2 3]
 [4 5 6]
 [7 8 9]]
```

Rotated-Filter (3, 3)

```
[[9 8 7]
 [6 5 4]
 [3 2 1]]
```

Convolution-Output (5, 5)

```
[[0. 0. 0. 0. 0.]
 [0. 1. 2. 3. 0.]
 [0. 4. 5. 6. 0.]
 [0. 7. 8. 9. 0.]
 [0. 0. 0. 0. 0.]]
```