

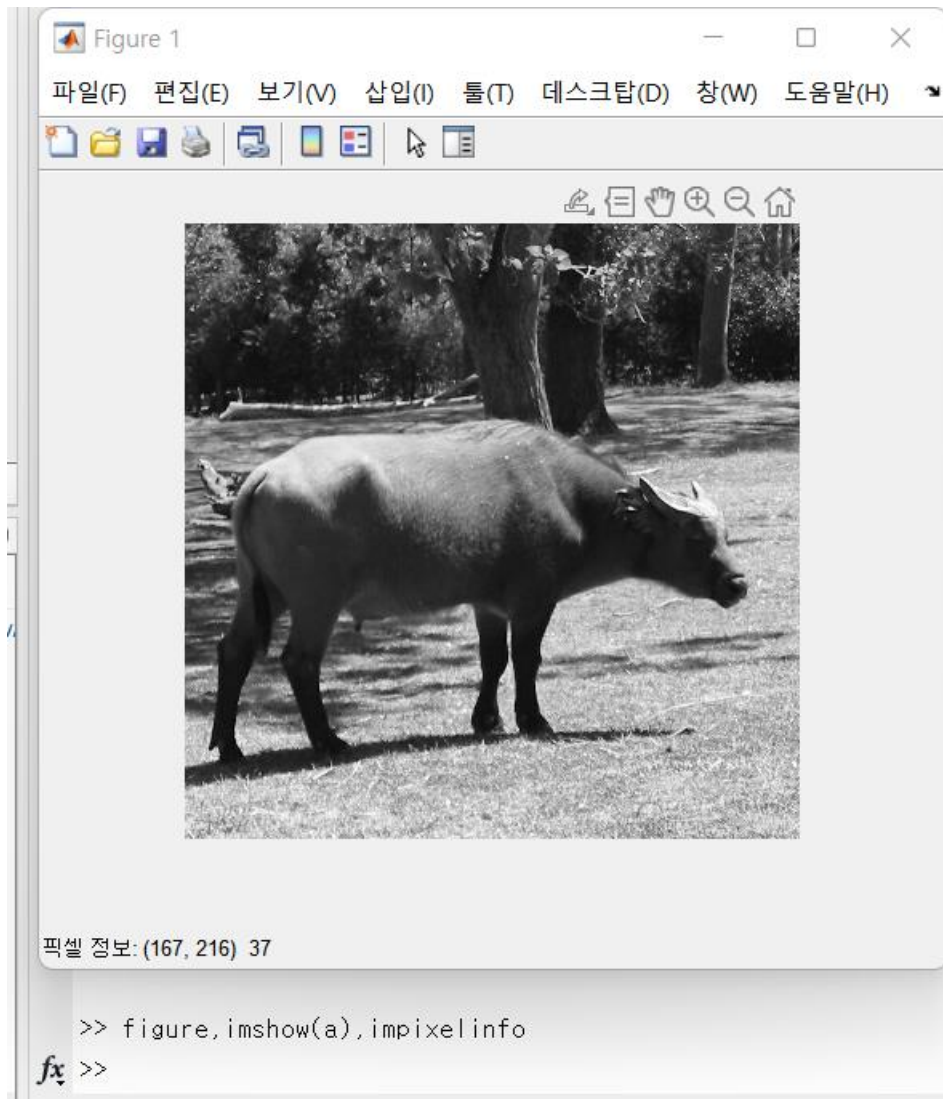
1번

병행 상

```
>> a=imread('buffalo.tif')
```



```
>> imshow(a)
```

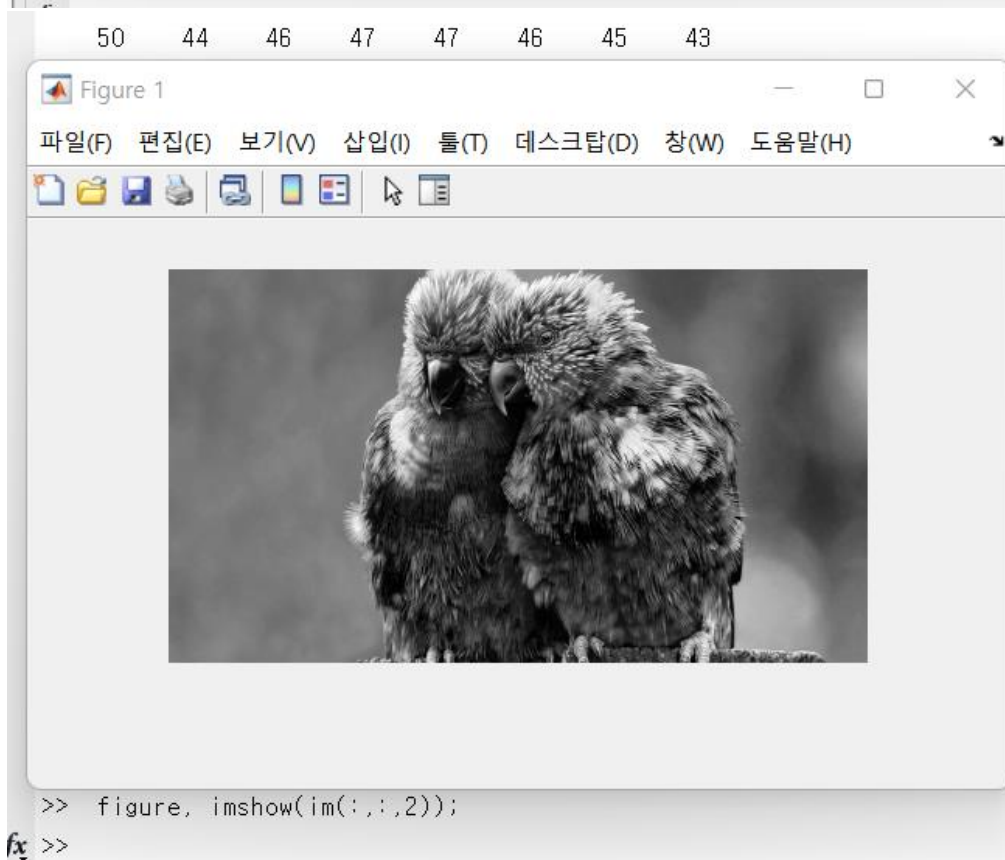


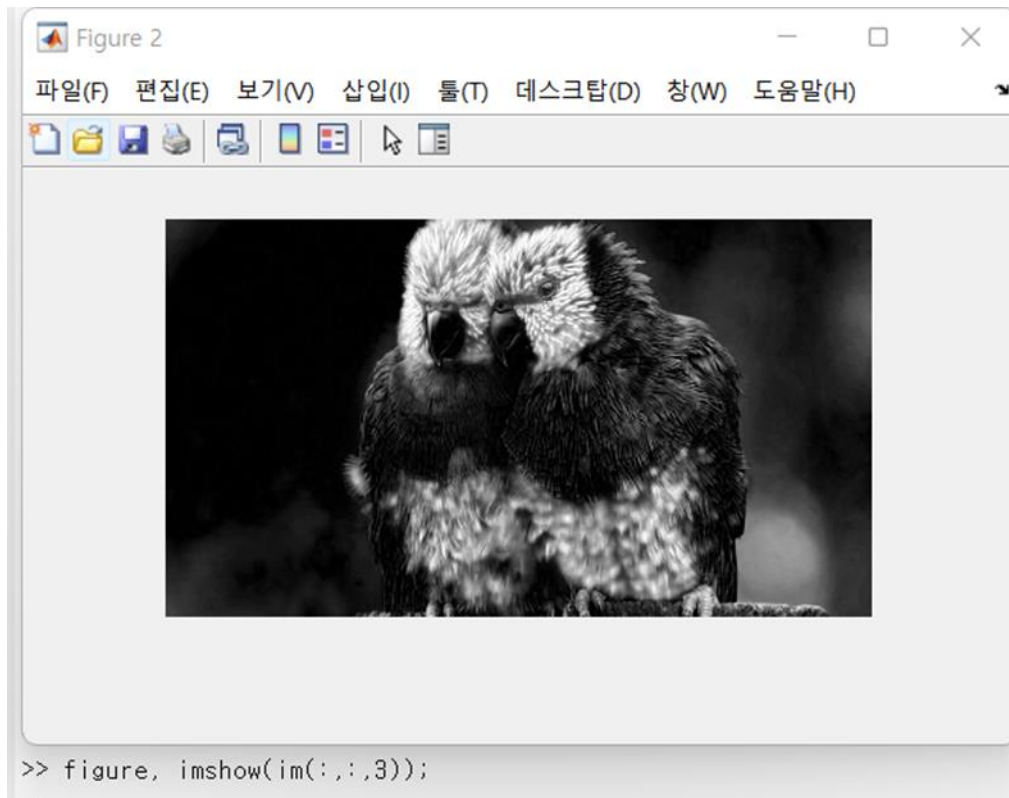
2번

```
o o o  
fx >> im = imread('birds.jpg')
```



사용하





3번

```

>> im = imread('birds.jpg')

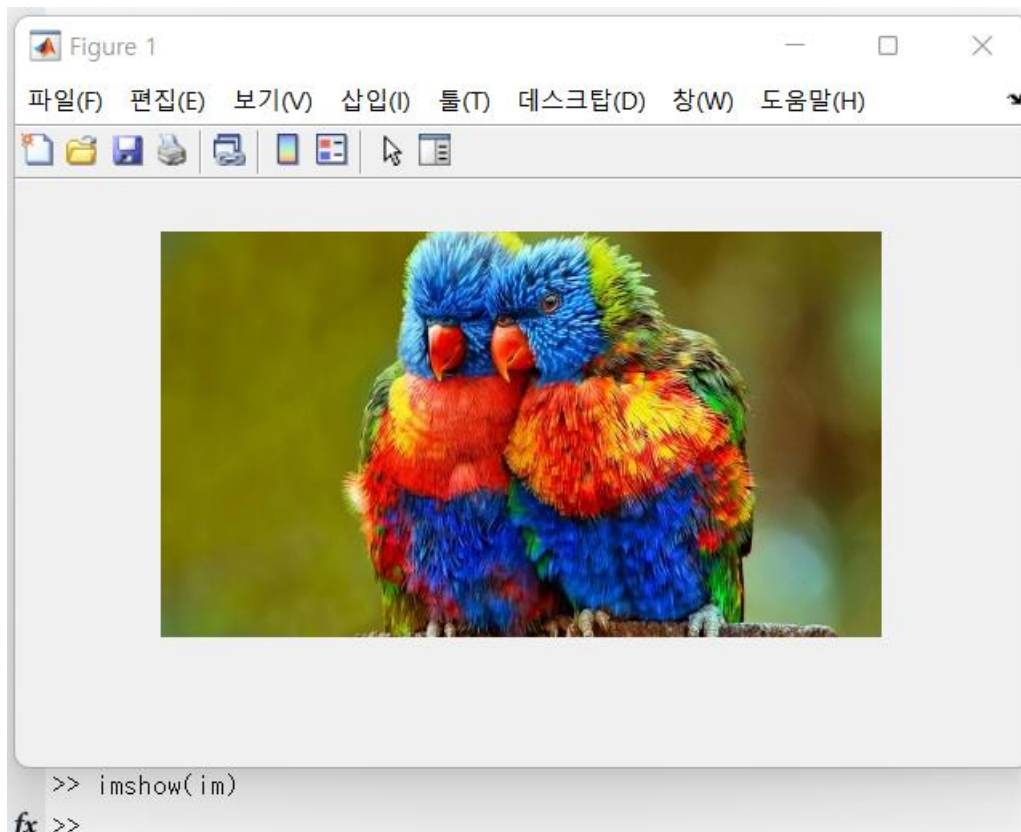
im      253x450x3 uint8
map     10x3 double

47    46    47    48    47    46    42
49    50    47    49    46    46    46
47    50    45    46    45    46    44
50    47    46    47    45    47    50
48    47    46    46    48    49    49
48    47    45    49    50    50    49
48    48    49    50    47    47    48
49    50    49    48    47    48    48
50    50    48    47    46    45    46

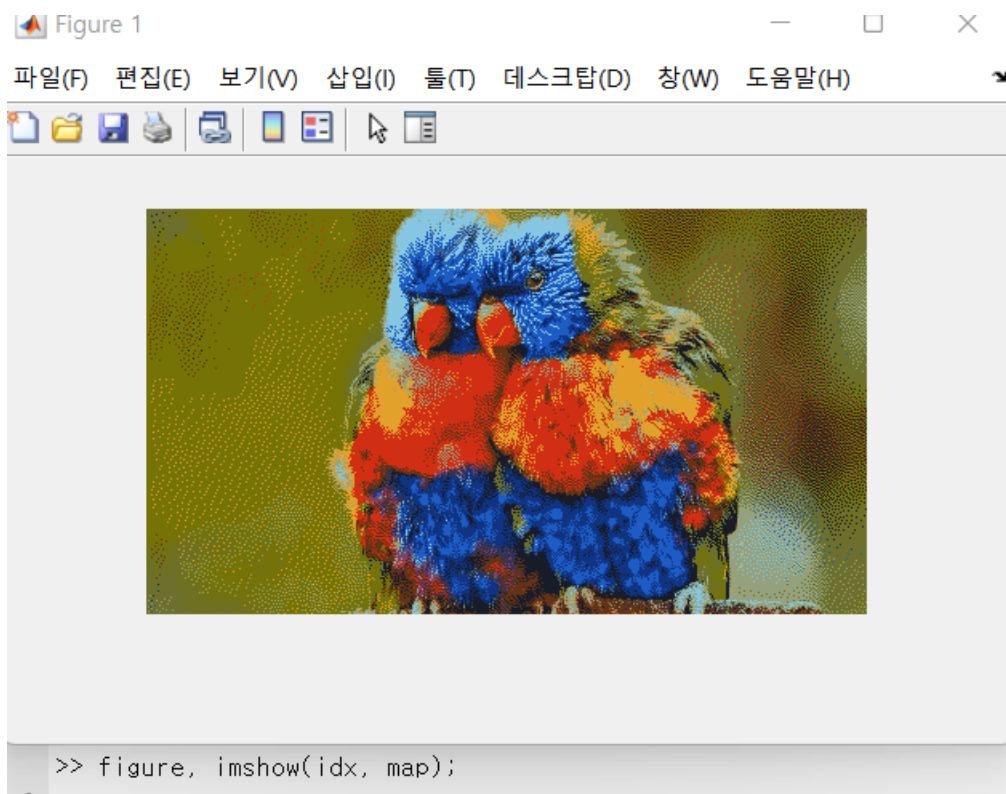
>> [idx, map] = rgb2ind(im, 10);

```

(3)



(4)



(5)

Index image는 컬러의 인덱스가 저장되어 있어서 제대로 로딩이 안되어있다. 제대로 로딩을 할려면 colormap이 필요하다.

4.

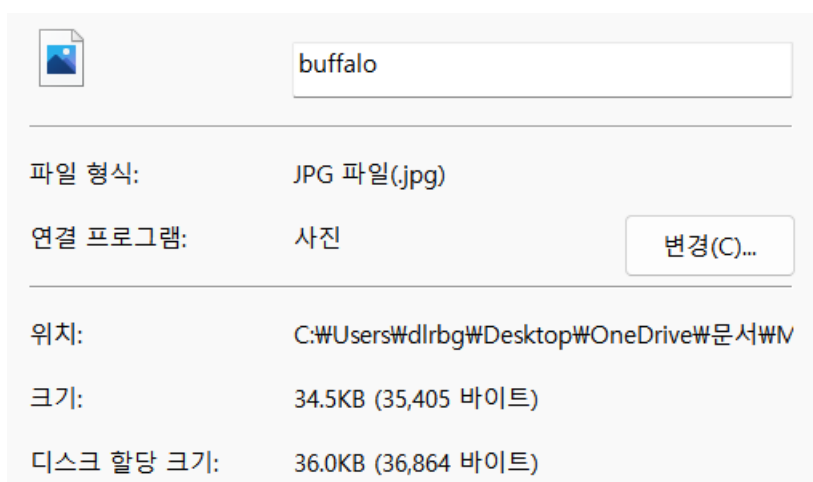
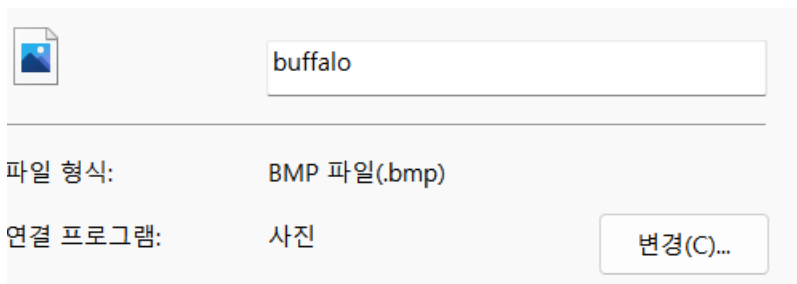
(1)

```
>> im = imread('buffalo.tif')
```

(2)

```
>> imwrite(im, 'buffalo.bmp', 'bmp')  
>> imwrite(im, 'buffalo.jpg', 'jpg')
```

(3)



Bmp는 대부분 무압축인 반면에 jpg는 손실압축을 사용하기 때문이다.

(4)

384x384 uint8

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|----|-----|-----|-----|-----|-----|-----|-----|----|
| 1 | 95 | 77 | 107 | 106 | 109 | 112 | 91 | 9 |
| 2 | 91 | 57 | 56 | 62 | 103 | 124 | 121 | 9 |
| 3 | 97 | 58 | 58 | 90 | 137 | 110 | 108 | 11 |
| 4 | 114 | 96 | 101 | 134 | 119 | 111 | 163 | 9 |
| 5 | 124 | 130 | 131 | 120 | 112 | 157 | 88 | 8 |
| 6 | 118 | 170 | 111 | 98 | 127 | 107 | 92 | 7 |
| 7 | 134 | 159 | 142 | 197 | 164 | 135 | 96 | 8 |
| 8 | 124 | 125 | 212 | 195 | 165 | 161 | 152 | 10 |
| 9 | 137 | 137 | 167 | 157 | 149 | 122 | 147 | 11 |
| 10 | 134 | 131 | 120 | 89 | 117 | 117 | 121 | 5 |
| 11 | 117 | 138 | 128 | 113 | 93 | 114 | 146 | 5 |
| 12 | 110 | 121 | 131 | 87 | 115 | 112 | 88 | 10 |
| 13 | 167 | 122 | 109 | 156 | 168 | 114 | 46 | 15 |
| 14 | 187 | 169 | 75 | 131 | 157 | 115 | 54 | 13 |
| 15 | 109 | 112 | 117 | 81 | 87 | 81 | 93 | 14 |

명령 창

```
fx >> b= imread('buffalo.bmp')
```

b x j x

384x384 uint8

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|----|-----|-----|-----|-----|-----|-----|-----|
| 1 | 96 | 72 | 104 | 103 | 107 | 122 | 91 |
| 2 | 92 | 68 | 62 | 63 | 115 | 116 | 116 |
| 3 | 101 | 48 | 53 | 85 | 133 | 101 | 120 |
| 4 | 117 | 100 | 89 | 146 | 140 | 102 | 160 |
| 5 | 133 | 112 | 154 | 108 | 89 | 162 | 104 |
| 6 | 116 | 177 | 95 | 123 | 129 | 108 | 86 |
| 7 | 134 | 166 | 139 | 185 | 177 | 128 | 96 |
| 8 | 130 | 116 | 221 | 202 | 147 | 180 | 141 |
| 9 | 137 | 140 | 161 | 161 | 144 | 125 | 145 |
| 10 | 135 | 111 | 133 | 90 | 110 | 129 | 114 |
| 11 | 123 | 141 | 133 | 106 | 90 | 101 | 167 |
| 12 | 102 | 118 | 127 | 99 | 122 | 115 | 86 |
| 13 | 193 | 99 | 106 | 154 | 158 | 112 | 45 |
| 14 | 186 | 169 | 96 | 127 | 174 | 101 | 48 |
| 15 | 105 | 99 | 117 | 70 | 82 | 87 | 92 |

명령 창

```
178 180 224 140 203 195 218 205 230 207 218
185 116 194 203 185 217 226 223 167 148 178
208 172 214 215 199 203 200 183 166 181 199
215 176 217 225 229 184 193 139 159 153 171
208 158 191 187 192 182 186 218 182 188 195
144 138 170 168 190 203 150 242 180 185 189
165 166 137 165 175 211 168 195 172 122 233
```

```
>> j= imread('buffalo.jpg')
```