Report 110590018 劉承翰

Result
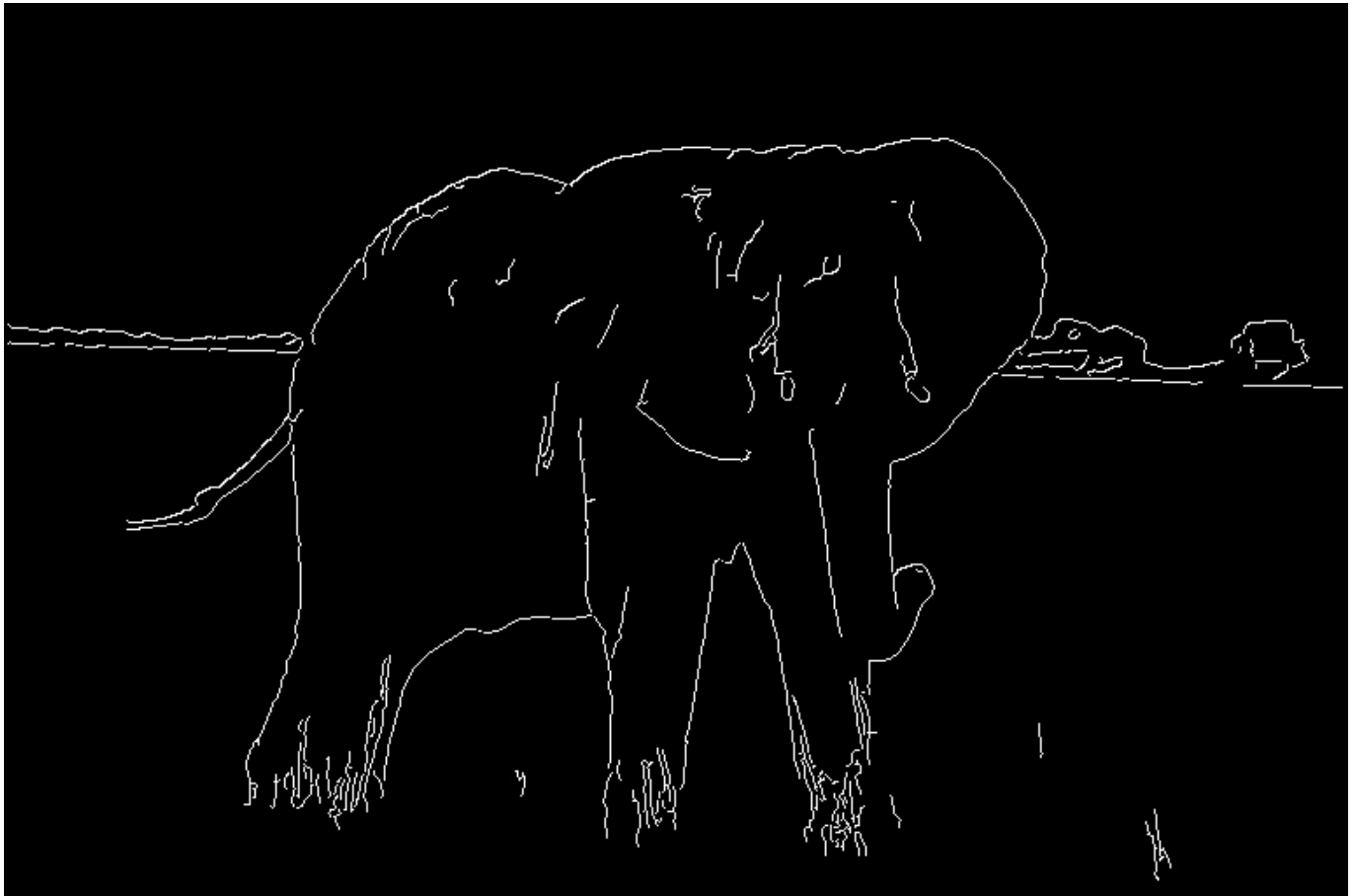
Step

Step 1:

```
  Convert to gray scale
```

Step 2:

```
  Apply Gaussian filter with sigma=1.1 and filter size=5*5
```

Step 3:

```
  Calculate the gradient and angle for each pixel
```

Step 4:

```
  Round the angles to 0, 45, 90, or 135 degrees
```

Step 5:

```
  Suppress non-maximum values for angles 0, 45, 90, and 135 degrees
```

Step 6:

> Use double thresholding with 50 and 140 to find weak edges and strong edges

Step 7:

> Use DFS to connect weak edges to nearby strong edges

Step 8:

> Obtain the final edges