Image Processing Project1 Answer Sheet

Name: Student ID: Department:

**1.(15%)**

|  |  |  |
| --- | --- | --- |
|  | Result of 4-adjacency | Result of 8-adjacency |
| Adj1\_1 |  |  |
| class |  |  |
| Adj1\_2 |  |  |
| class |  |  |
| Explain the answer: | | |

**2.(45%)**

**Note: If you choose *histogram specification*, you must *show the histogram that designed by yourself*.**

|  |  |  |
| --- | --- | --- |
| **problem2\_1.bmp** (20%) | | |
| Original image of problem2\_1.bmp | Histogram of problem2\_1.bmp | |
|  |  | |
| Explain the answer of histogram | | |
| problem2\_1.bmp use histogram equalization | | Histogram of problem2\_1.bmp after operating |
|  | |  |
| problem2\_1.bmp use histogram specification | | Histogram of problem2\_1.bmp after operating |
|  | |  |
| Compare the result of problem2\_1.bmp after operating with two methods and explain the desired histogram | | |

|  |  |
| --- | --- |
| **problem2\_2.bmp (20%)** | |
| Original image of problem2\_2.bmp | Histogram of problem2\_2.bmp |
|  |  |
| Explain the Histogram: | |
| problem2\_2.bmp use histogram equalization | Histogram of problem2\_2.bmp after operating |
|  |  |
| problem2\_2.bmp use histogram specification | Histogram of problem2\_2.bmp after operating |
|  |  |
| Compare the result of problem2\_2.bmp after operating with two methods and explain the desired histogram | |

3.(40%)

|  |  |
| --- | --- |
| (1) Two results after using local histogram equalization in different size of mask | |
| Mask size: | Mask size: |
|  |  |
| Compare the results of difference size of mask in detail after using Local histogram equalization: | |
| (2) Two results after using histogram statistics (different size of mask, same parameter) | |
| Mask size:  4 parameters: | Mask size:  4 parameters: |
|  |  |
| Two results after using histogram statistics (same size of mask, different parameter) | |
| Mask size:  4 parameters: | Mask size:  4 parameters: |
|  |  |
| Compare the results of difference size of mask and parameters in detail after using histogram statistics: | |