EikonaMark 4.5.1 - 800C.jpg

File   Watermark   View   Window   Help

800C.jpg

Watermark Detection Options

Key: 100050

Enable geometry search

Usage
- Copyright
- Authentication

Angle
- Initial: 0
- Final: 0
- Step: Small / Large

Scale
- Min: 1
- Max: 1
- Step: Small / Large

Type
Zero Bit Watermark

☑ Display Tampered Regions
☐ Display Extracted Logo
☐ Partial Detection

Logo
Browse...   W: 0, H: 0

OK   Cancel

EikonaMark 4.5.1 - 800C.jpg - Tampered Regions

File   Watermark   View   Window   Help

800C.jpg

800C.jpg - Tampered Regions

EikonaMark 4.5.1
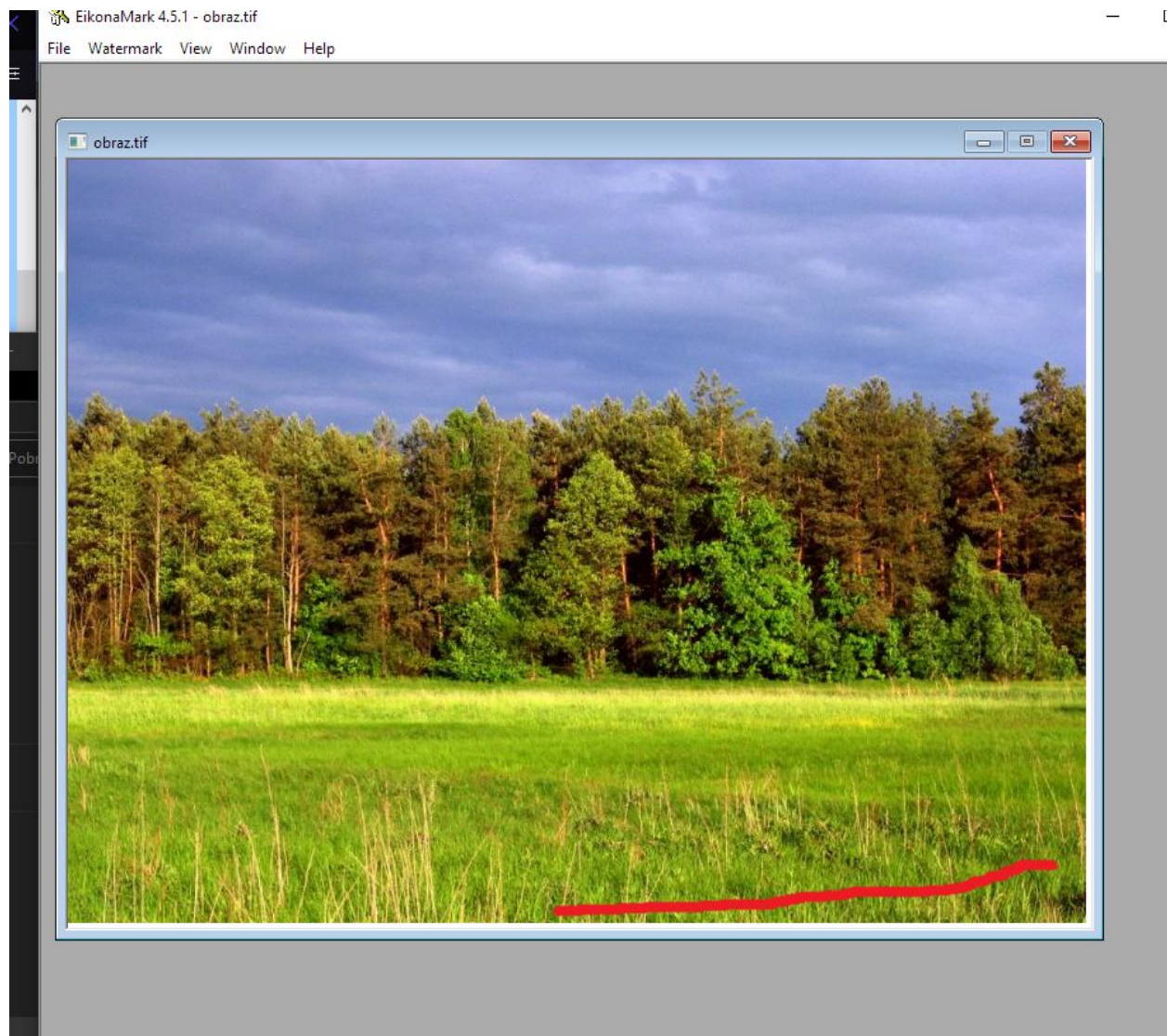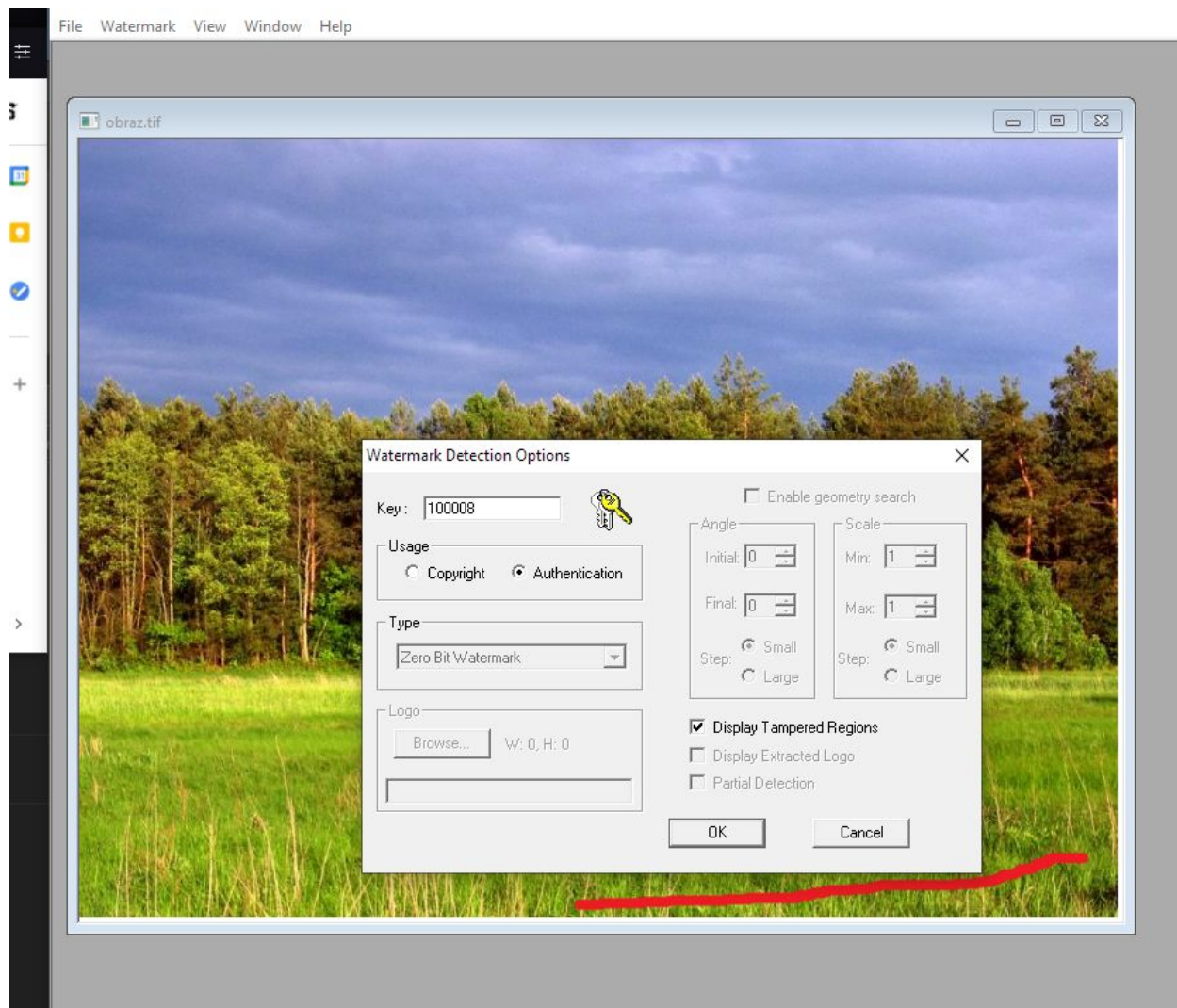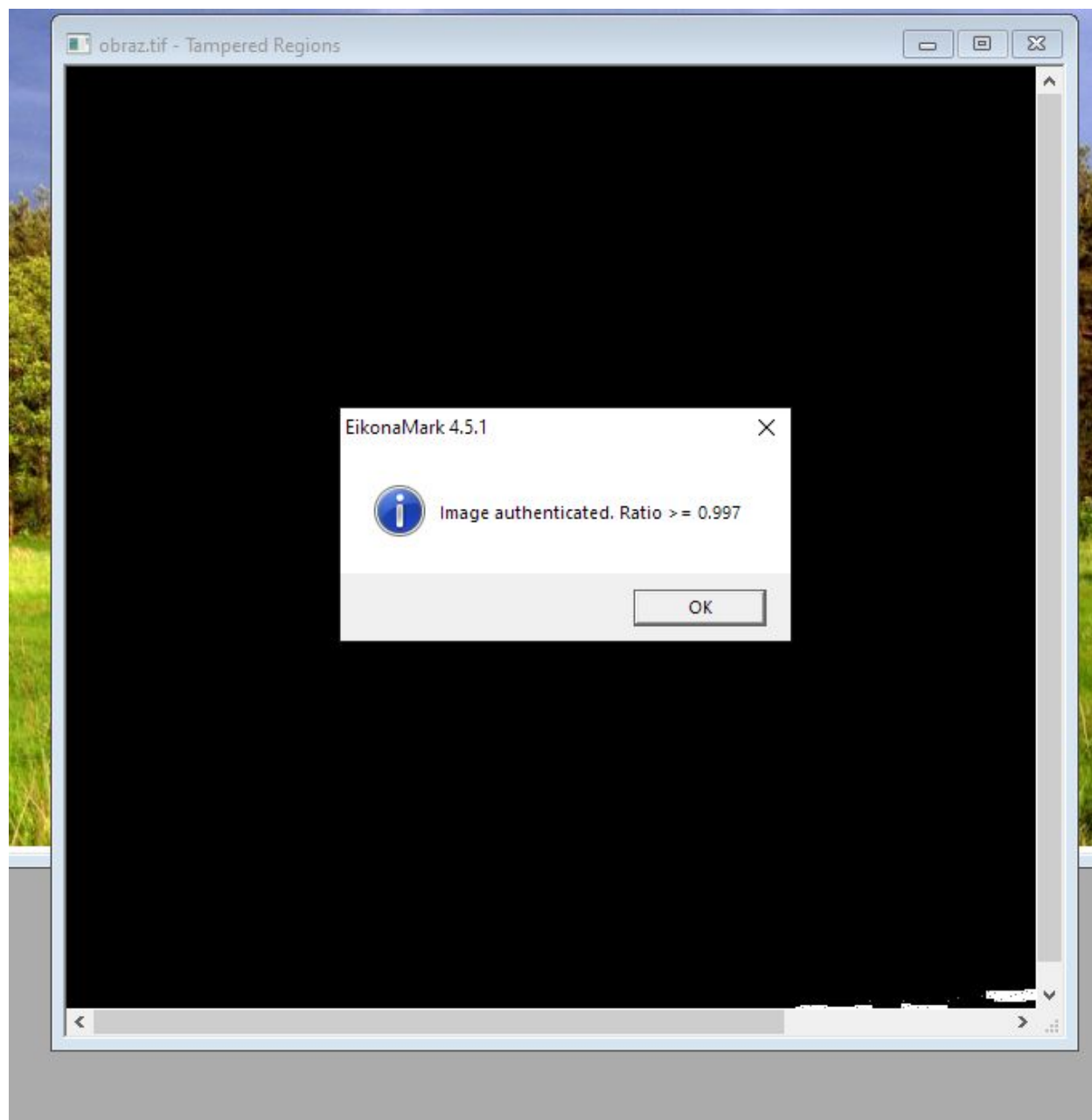
ⓘ Image authenticated. Ratio >= 0.996

OK

Znak wodny został umieszczony w lewej części obrazu. Tuż obok osób oddalonych osób.
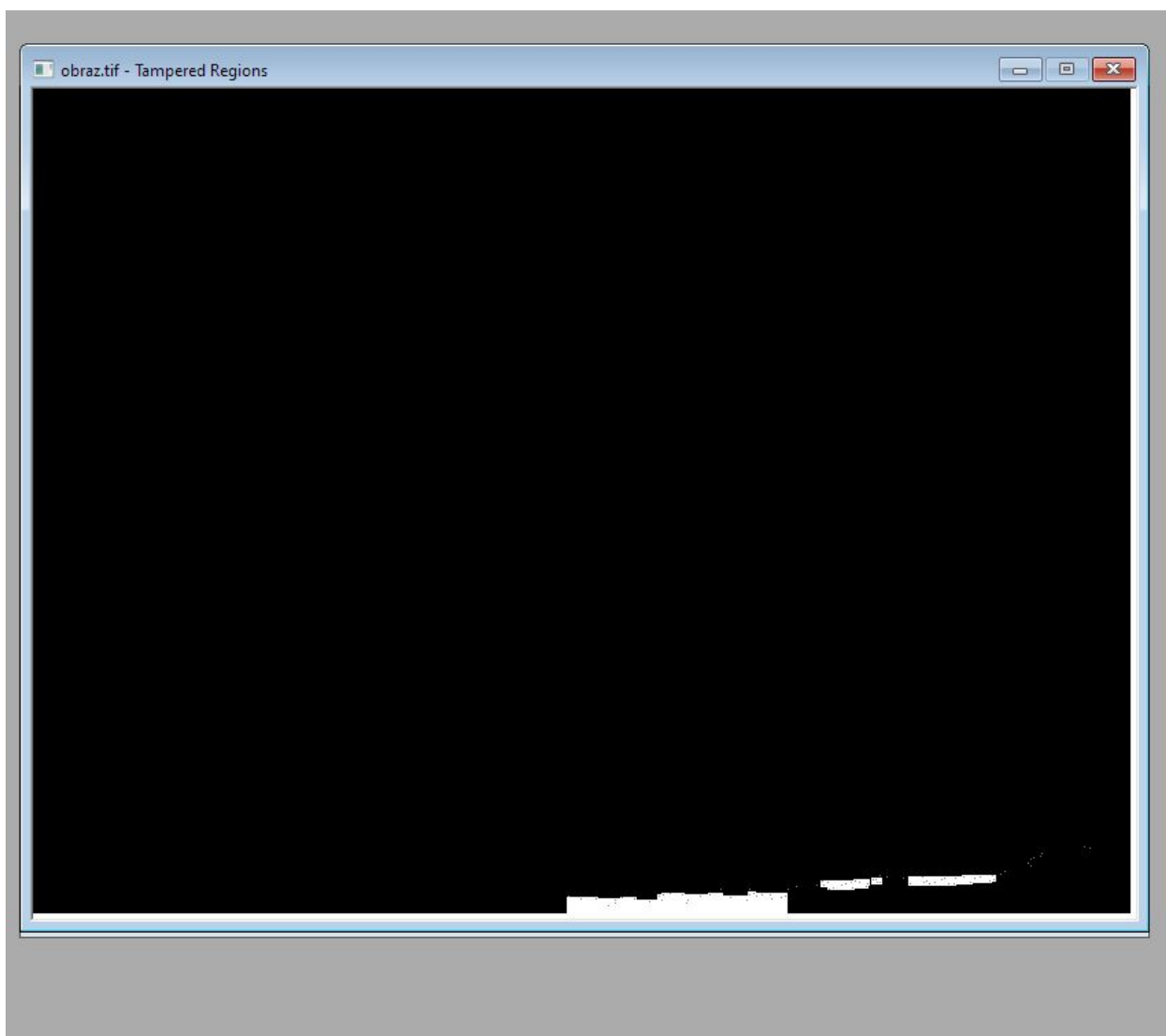
1.3
Obraz zmodyfikowany przez kolegę

File   Watermark   View   Window   Help

obraz.tif

Watermark Detection Options

Key : 100008

Usage
- ○ Copyright   ● Authentication

Type
Zero Bit Watermark

Logo
Browse...   W: 0, H: 0

☐ Enable geometry search

Angle
- Initial: 0
- Final: 0
- Step: ● Small ○ Large

Scale
- Min: 1
- Max: 1
- Step: ● Small ○ Large

☑ Display Tampered Regions
☐ Display Extracted Logo
☐ Partial Detection

OK   Cancel

obraz.tif - Tampered Regions

EikonaMark 4.5.1

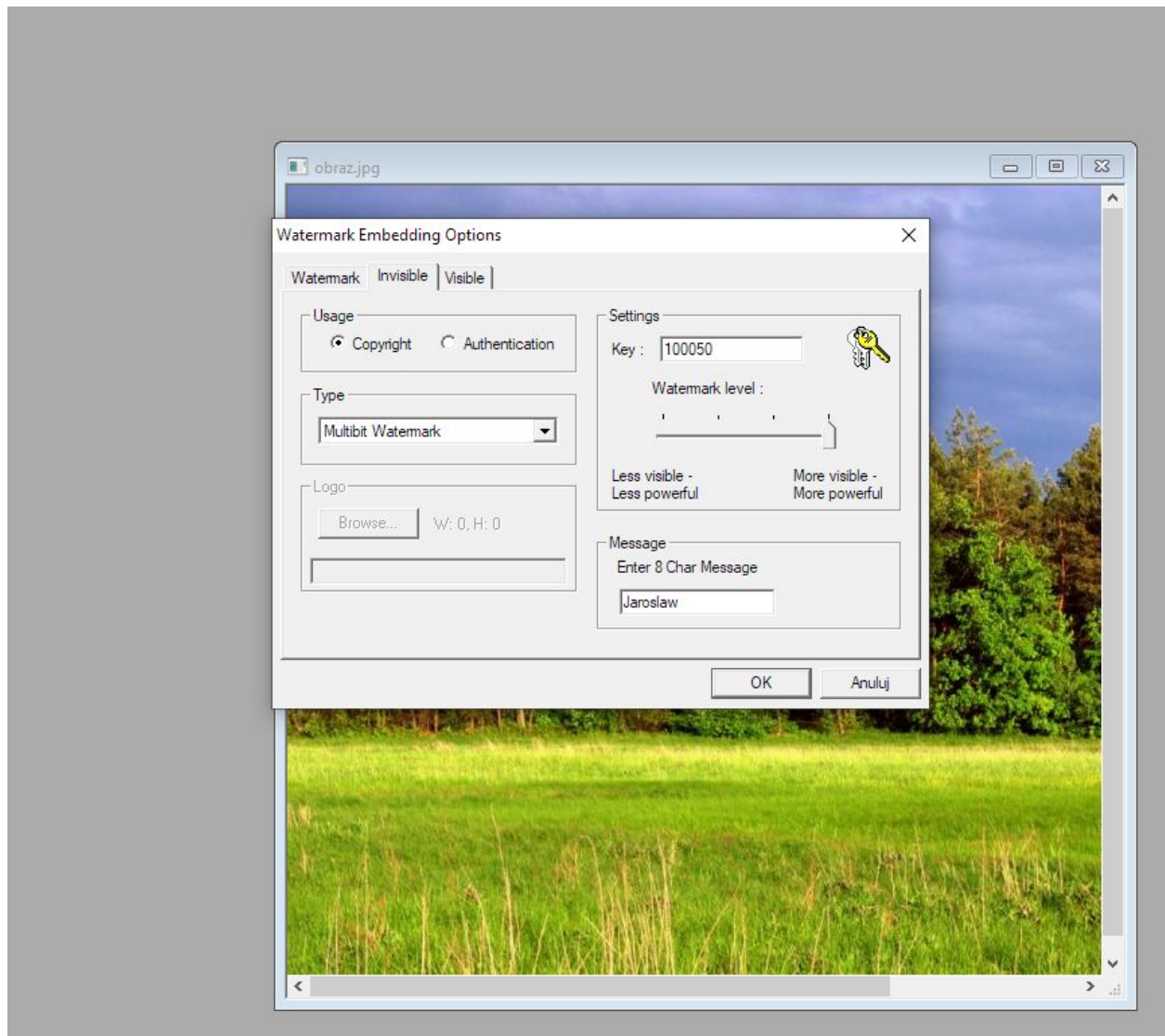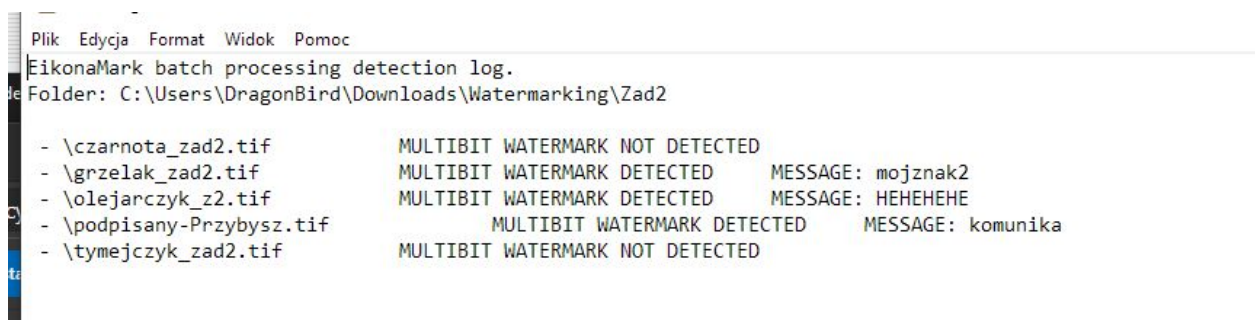Image authenticated. Ratio >= 0.997

OK

Jak widać została wykryta znacząca część modyfikacji przeprowadzonej przez kolegę. Detekcja nie jest w pełni dokładna ale zdecydowanie widać że coś zostało zmienione w obrazie.

2.1

2.2

Zostały pokazane 8 znakowe wiadomości z plików w których zostały umieszczone znaki wodne. Nie wszystkie udało się odkodować.

3.0

400_1

obraz o rozmiarze 400x257 z osadzonym najsłabszym znakiem wodnym

detect.log — Notatnik

Plik   Edycja   Format   Widok   Pomoc

EikonaMark batch processing detection log.
Folder: C:\Users\DragonBird\Downloads\Watermarking\Zad3\cracked\400_1.jpg

```
- \400_1.jpg                              WATERMARK DETECTED
- \400_1.jpg_17_row_5_col_removed.jpg            WATERMARK NOT DETECTED
- \400_1.jpg_1_row_1_col_removed.jpg             WATERMARK DETECTED
- \400_1.jpg_1_row_5_col_removed.jpg             WATERMARK NOT DETECTED
- \400_1.jpg_2x2_median_filter.jpg               WATERMARK DETECTED
- \400_1.jpg_3x3_median_filter.jpg               WATERMARK DETECTED
- \400_1.jpg_4x4_median_filter.jpg               WATERMARK NOT DETECTED
- \400_1.jpg_5_row_17_col_removed.jpg            WATERMARK NOT DETECTED
- \400_1.jpg_5_row_1_col_removed.jpg             WATERMARK NOT DETECTED
- \400_1.jpg_cropping_1.jpg             WATERMARK NOT DETECTED
- \400_1.jpg_cropping_10.jpg            WATERMARK NOT DETECTED
- \400_1.jpg_cropping_15.jpg            WATERMARK NOT DETECTED
- \400_1.jpg_cropping_2.jpg             WATERMARK NOT DETECTED
- \400_1.jpg_cropping_20.jpg            WATERMARK NOT DETECTED
- \400_1.jpg_cropping_25.jpg            WATERMARK NOT DETECTED
- \400_1.jpg_cropping_5.jpg             WATERMARK NOT DETECTED
- \400_1.jpg_cropping_50.jpg            WATERMARK NOT DETECTED
- \400_1.jpg_cropping_75.jpg            WATERMARK NOT DETECTED
- \400_1.jpg_FMLR.jpg            WATERMARK DETECTED
- \400_1.jpg_Gaussian_filtering_3_3.jpg                WATERMARK DETECTED
- \400_1.jpg_linear_1.007_0.010_0.010_1.012.jpg               WATERMARK NOT DETECTED
- \400_1.jpg_linear_1.010_0.013_0.009_1.011.jpg               WATERMARK NOT DETECTED
- \400_1.jpg_linear_1.013_0.008_0.011_1.008.jpg               WATERMARK NOT DETECTED
- \400_1.jpg_ratio_x_0.80_y_1.00.jpg             WATERMARK NOT DETECTED
- \400_1.jpg_ratio_x_0.90_y_1.00.jpg             WATERMARK NOT DETECTED
- \400_1.jpg_ratio_x_1.00_y_0.80.jpg             WATERMARK NOT DETECTED
- \400_1.jpg_ratio_x_1.00_y_0.90.jpg             WATERMARK NOT DETECTED
- \400_1.jpg_ratio_x_1.00_y_1.10.jpg             WATERMARK NOT DETECTED
- \400_1.jpg_ratio_x_1.00_y_1.20.jpg             WATERMARK NOT DETECTED
- \400_1.jpg_ratio_x_1.10_y_1.00.jpg             WATERMARK NOT DETECTED
- \400_1.jpg_ratio_x_1.20_y_1.00.jpg             WATERMARK NOT DETECTED
- \400_1.jpg_rotation_-0.25.jpg             WATERMARK NOT DETECTED
- \400_1.jpg_rotation_-0.50.jpg             WATERMARK NOT DETECTED
- \400_1.jpg_rotation_-0.75.jpg             WATERMARK NOT DETECTED
- \400_1.jpg_rotation_-1.00.jpg             WATERMARK NOT DETECTED
- \400_1.jpg_rotation_-2.00.jpg             WATERMARK NOT DETECTED
- \400_1.jpg_rotation_0.25.jpg            WATERMARK NOT DETECTED
- \400_1.jpg_rotation_0.50.jpg            WATERMARK NOT DETECTED
- \400_1.jpg_rotation_0.75.jpg            WATERMARK NOT DETECTED
- \400_1.jpg_rotation_1.00.jpg            WATERMARK NOT DETECTED
- \400_1.jpg_rotation_10.00.jpg             WATERMARK NOT DETECTED
- \400_1.jpg_rotation_15.00.jpg             WATERMARK NOT DETECTED
- \400_1.jpg_rotation_2.00.jpg            WATERMARK NOT DETECTED
- \400_1.jpg_rotation_30.00.jpg             WATERMARK NOT DETECTED
- \400_1.jpg_rotation_45.00.jpg             WATERMARK NOT DETECTED
- \400_1.jpg_rotation_5.00.jpg            WATERMARK NOT DETECTED
- \400_1.jpg_rotation_90.00.jpg             WATERMARK NOT DETECTED
- \400_1.jpg_rotation_scale_-0.25.jpg             WATERMARK NOT DETECTED
- \400_1.jpg_rotation_scale_-0.50.jpg             WATERMARK NOT DETECTED
- \400_1.jpg_rotation_scale_-0.75.jpg             WATERMARK NOT DETECTED
```

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*detect.log — Notatnik

Plik  Edycja  Format  Widok  Pomoc
EikonaMark batch processing detection log.
Folder: C:\Users\DragonBird\Downloads\Watermarking\Zad3\cracked\400_1.jpg

 - \400_1.jpg              WATERMARK DETECTED
 - \400_1.jpg_1_row_1_col_removed.jpg          WATERMARK DETECTED
 - \400_1.jpg_2x2_median_filter.jpg            WATERMARK DETECTED
 - \400_1.jpg_3x3_median_filter.jpg            WATERMARK DETECTED
 - \400_1.jpg_FMLR.jpg          WATERMARK DETECTED
 - \400_1.jpg_Gaussian_filtering_3_3.jpg                WATERMARK DETECTED
 - \400_1.jpg_Sharpening_3_3.jpg               WATERMARK DETECTED
```
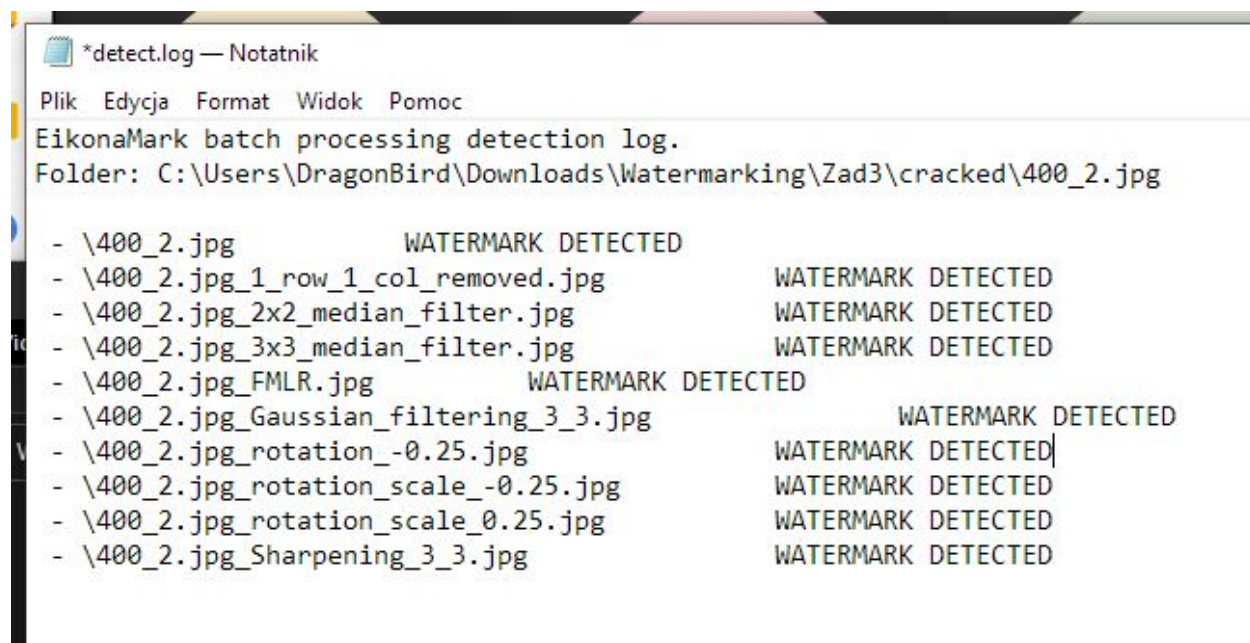
Programowi ciężko było wykryć znak wodny na obrazie. Jedynie metody : Filtr Gaussa, filtr środkowy, filtr FMLR oraz usuwanie kolumn i wierszy odniosło jakieś skutki.

400_2

obraz o rozmiarze 400x257 z osadzonym najmocniejszym znakiem wodnym

```
EikonaMark batch processing detection log.
Folder: C:\Users\DragonBird\Downloads\Watermarking\Zad3\cracked\400_2.jpg

 - \400_2.jpg                  WATERMARK DETECTED
 - \400_2.jpg_17_row_5_col_removed.jpg        WATERMARK NOT DETECTED
 - \400_2.jpg_1_row_1_col_removed.jpg         WATERMARK DETECTED
 - \400_2.jpg_1_row_5_col_removed.jpg         WATERMARK NOT DETECTED
 - \400_2.jpg_2x2_median_filter.jpg           WATERMARK DETECTED
 - \400_2.jpg_3x3_median_filter.jpg           WATERMARK DETECTED
 - \400_2.jpg_4x4_median_filter.jpg           WATERMARK NOT DETECTED
 - \400_2.jpg_5_row_17_col_removed.jpg        WATERMARK NOT DETECTED
 - \400_2.jpg_5_row_1_col_removed.jpg         WATERMARK NOT DETECTED
 - \400_2.jpg_cropping_1.jpg          WATERMARK NOT DETECTED
 - \400_2.jpg_cropping_10.jpg         WATERMARK NOT DETECTED
 - \400_2.jpg_cropping_15.jpg         WATERMARK NOT DETECTED
 - \400_2.jpg_cropping_2.jpg          WATERMARK NOT DETECTED
 - \400_2.jpg_cropping_20.jpg         WATERMARK NOT DETECTED
 - \400_2.jpg_cropping_25.jpg         WATERMARK NOT DETECTED
 - \400_2.jpg_cropping_5.jpg          WATERMARK NOT DETECTED
 - \400_2.jpg_cropping_50.jpg         WATERMARK NOT DETECTED
 - \400_2.jpg_cropping_75.jpg         WATERMARK NOT DETECTED
 - \400_2.jpg_FMLR.jpg            WATERMARK DETECTED
 - \400_2.jpg_Gaussian_filtering_3_3.jpg              WATERMARK DETECTED
 - \400_2.jpg_linear_1.007_0.010_0.010_1.012.jpg           WATERMARK NOT DETECTED
 - \400_2.jpg_linear_1.010_0.013_0.009_1.011.jpg           WATERMARK NOT DETECTED
 - \400_2.jpg_linear_1.013_0.008_0.011_1.008.jpg           WATERMARK NOT DETECTED
 - \400_2.jpg_ratio_x_0.80_y_1.00.jpg          WATERMARK NOT DETECTED
 - \400_2.jpg_ratio_x_0.90_y_1.00.jpg          WATERMARK NOT DETECTED
 - \400_2.jpg_ratio_x_1.00_y_0.80.jpg          WATERMARK NOT DETECTED
 - \400_2.jpg_ratio_x_1.00_y_0.90.jpg          WATERMARK NOT DETECTED
 - \400_2.jpg_ratio_x_1.00_y_1.10.jpg          WATERMARK NOT DETECTED
 - \400_2.jpg_ratio_x_1.00_y_1.20.jpg          WATERMARK NOT DETECTED
 - \400_2.jpg_ratio_x_1.10_y_1.00.jpg          WATERMARK NOT DETECTED
 - \400_2.jpg_ratio_x_1.20_y_1.00.jpg          WATERMARK NOT DETECTED
 - \400_2.jpg_rotation_-0.25.jpg           WATERMARK DETECTED
 - \400_2.jpg_rotation_-0.50.jpg           WATERMARK NOT DETECTED
 - \400_2.jpg_rotation_-0.75.jpg           WATERMARK NOT DETECTED
 - \400_2.jpg_rotation_-1.00.jpg           WATERMARK NOT DETECTED
 - \400_2.jpg_rotation_-2.00.jpg           WATERMARK NOT DETECTED
 - \400_2.jpg_rotation_0.25.jpg       WATERMARK NOT DETECTED
 - \400_2.jpg_rotation_0.50.jpg       WATERMARK NOT DETECTED
 - \400_2.jpg_rotation_0.75.jpg       WATERMARK NOT DETECTED
 - \400_2.jpg_rotation_1.00.jpg       WATERMARK NOT DETECTED
 - \400_2.jpg_rotation_10.00.jpg           WATERMARK NOT DETECTED
 - \400_2.jpg_rotation_15.00.jpg           WATERMARK NOT DETECTED
 - \400_2.jpg_rotation_2.00.jpg       WATERMARK NOT DETECTED
 - \400_2.jpg_rotation_30.00.jpg           WATERMARK NOT DETECTED
 - \400_2.jpg_rotation_45.00.jpg           WATERMARK NOT DETECTED
 - \400_2.jpg_rotation_5.00.jpg       WATERMARK NOT DETECTED
 - \400_2.jpg_rotation_90.00.jpg           WATERMARK NOT DETECTED
 - \400_2.jpg_rotation_scale_-0.25.jpg         WATERMARK DETECTED
 - \400_2.jpg_rotation_scale_-0.50.jpg         WATERMARK NOT DETECTED
 - \400_2.jpg_rotation_scale_-0.75.jpg         WATERMARK NOT DETECTED
```

```
*detect.log — Notatnik

Plik  Edycja  Format  Widok  Pomoc
EikonaMark batch processing detection log.
Folder: C:\Users\DragonBird\Downloads\Watermarking\Zad3\cracked\400_2.jpg

  - \400_2.jpg                WATERMARK DETECTED
  - \400_2.jpg_1_row_1_col_removed.jpg              WATERMARK DETECTED
  - \400_2.jpg_2x2_median_filter.jpg               WATERMARK DETECTED
  - \400_2.jpg_3x3_median_filter.jpg               WATERMARK DETECTED
  - \400_2.jpg_FMLR.jpg          WATERMARK DETECTED
  - \400_2.jpg_Gaussian_filtering_3_3.jpg                  WATERMARK DETECTED
  - \400_2.jpg_rotation_-0.25.jpg             WATERMARK DETECTED
  - \400_2.jpg_rotation_scale_-0.25.jpg             WATERMARK DETECTED
  - \400_2.jpg_rotation_scale_0.25.jpg              WATERMARK DETECTED
  - \400_2.jpg_Sharpening_3_3.jpg              WATERMARK DETECTED
```

Przy silniejszym znaku możemy zauważyć, że rotacja była w stanie wykryć znak wodny.

1200_1.jpg
obraz o rozmiarze 1200x771 z osadzonym najsłabszym znakiem wodnym

detect.log — Notatnik

Plik Edycja Format Widok Pomoc

EikonaMark batch processing detection log.
Folder: C:\Users\DragonBird\Downloads\Watermarking\Zad3\cracked\1200_1.jpg
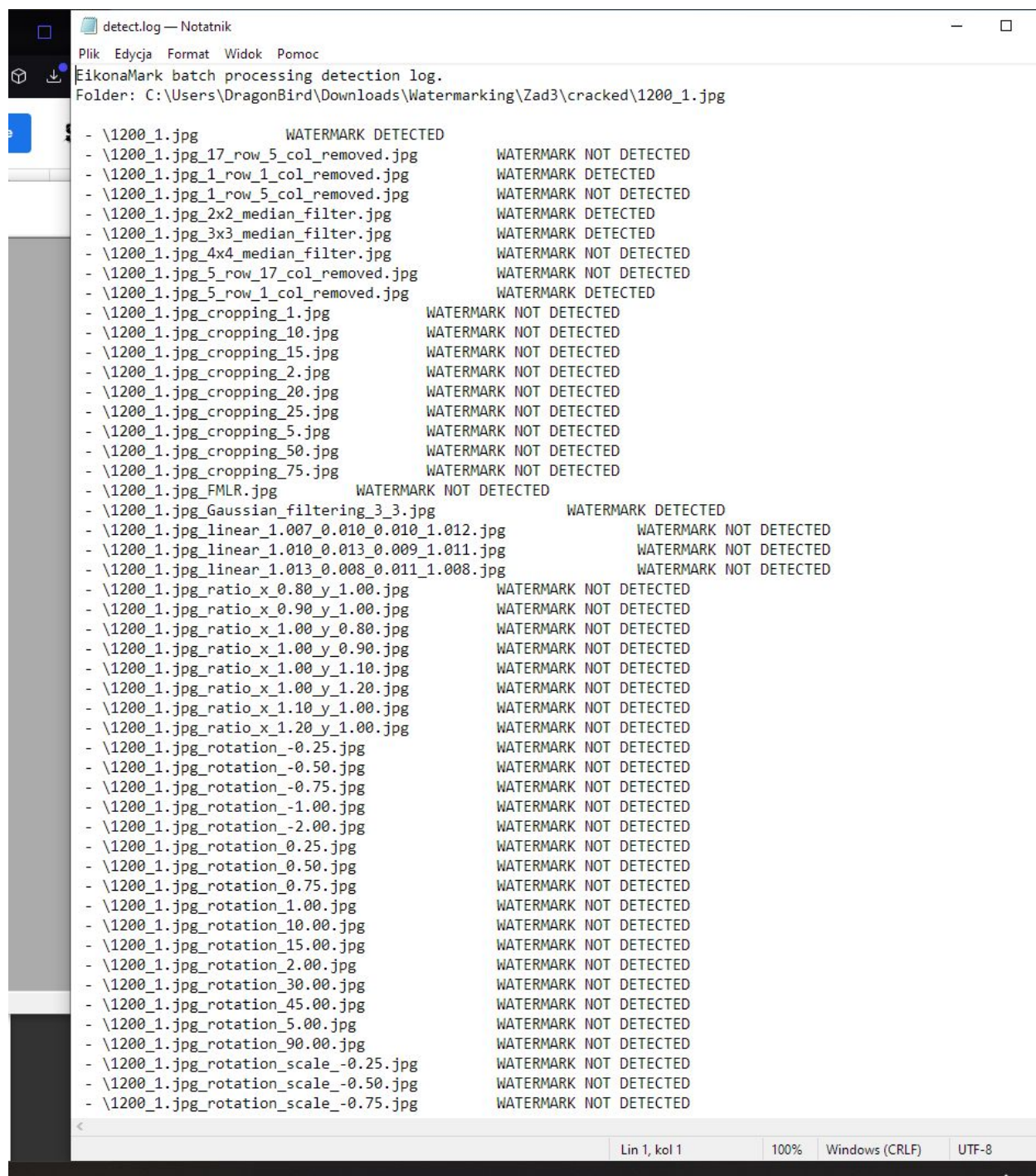
- \1200_1.jpg   WATERMARK DETECTED
- \1200_1.jpg_17_row_5_col_removed.jpg   WATERMARK NOT DETECTED
- \1200_1.jpg_1_row_1_col_removed.jpg   WATERMARK DETECTED
- \1200_1.jpg_1_row_5_col_removed.jpg   WATERMARK NOT DETECTED
- \1200_1.jpg_2x2_median_filter.jpg   WATERMARK DETECTED
- \1200_1.jpg_3x3_median_filter.jpg   WATERMARK DETECTED
- \1200_1.jpg_4x4_median_filter.jpg   WATERMARK NOT DETECTED
- \1200_1.jpg_5_row_17_col_removed.jpg   WATERMARK NOT DETECTED
- \1200_1.jpg_5_row_1_col_removed.jpg   WATERMARK DETECTED
- \1200_1.jpg_cropping_1.jpg   WATERMARK NOT DETECTED
- \1200_1.jpg_cropping_10.jpg   WATERMARK NOT DETECTED
- \1200_1.jpg_cropping_15.jpg   WATERMARK NOT DETECTED
- \1200_1.jpg_cropping_2.jpg   WATERMARK NOT DETECTED
- \1200_1.jpg_cropping_20.jpg   WATERMARK NOT DETECTED
- \1200_1.jpg_cropping_25.jpg   WATERMARK NOT DETECTED
- \1200_1.jpg_cropping_5.jpg   WATERMARK NOT DETECTED
- \1200_1.jpg_cropping_50.jpg   WATERMARK NOT DETECTED
- \1200_1.jpg_cropping_75.jpg   WATERMARK NOT DETECTED
- \1200_1.jpg_FMLR.jpg   WATERMARK NOT DETECTED
- \1200_1.jpg_Gaussian_filtering_3_3.jpg   WATERMARK DETECTED
- \1200_1.jpg_linear_1.007_0.010_0.010_1.012.jpg   WATERMARK NOT DETECTED
- \1200_1.jpg_linear_1.010_0.013_0.009_1.011.jpg   WATERMARK NOT DETECTED
- \1200_1.jpg_linear_1.013_0.008_0.011_1.008.jpg   WATERMARK NOT DETECTED
- \1200_1.jpg_ratio_x_0.80_y_1.00.jpg   WATERMARK NOT DETECTED
- \1200_1.jpg_ratio_x_0.90_y_1.00.jpg   WATERMARK NOT DETECTED
- \1200_1.jpg_ratio_x_1.00_y_0.80.jpg   WATERMARK NOT DETECTED
- \1200_1.jpg_ratio_x_1.00_y_0.90.jpg   WATERMARK NOT DETECTED
- \1200_1.jpg_ratio_x_1.00_y_1.10.jpg   WATERMARK NOT DETECTED
- \1200_1.jpg_ratio_x_1.00_y_1.20.jpg   WATERMARK NOT DETECTED
- \1200_1.jpg_ratio_x_1.10_y_1.00.jpg   WATERMARK NOT DETECTED
- \1200_1.jpg_ratio_x_1.20_y_1.00.jpg   WATERMARK NOT DETECTED
- \1200_1.jpg_rotation_-0.25.jpg   WATERMARK NOT DETECTED
- \1200_1.jpg_rotation_-0.50.jpg   WATERMARK NOT DETECTED
- \1200_1.jpg_rotation_-0.75.jpg   WATERMARK NOT DETECTED
- \1200_1.jpg_rotation_-1.00.jpg   WATERMARK NOT DETECTED
- \1200_1.jpg_rotation_-2.00.jpg   WATERMARK NOT DETECTED
- \1200_1.jpg_rotation_0.25.jpg   WATERMARK NOT DETECTED
- \1200_1.jpg_rotation_0.50.jpg   WATERMARK NOT DETECTED
- \1200_1.jpg_rotation_0.75.jpg   WATERMARK NOT DETECTED
- \1200_1.jpg_rotation_1.00.jpg   WATERMARK NOT DETECTED
- \1200_1.jpg_rotation_10.00.jpg   WATERMARK NOT DETECTED
- \1200_1.jpg_rotation_15.00.jpg   WATERMARK NOT DETECTED
- \1200_1.jpg_rotation_2.00.jpg   WATERMARK NOT DETECTED
- \1200_1.jpg_rotation_30.00.jpg   WATERMARK NOT DETECTED
- \1200_1.jpg_rotation_45.00.jpg   WATERMARK NOT DETECTED
- \1200_1.jpg_rotation_5.00.jpg   WATERMARK NOT DETECTED
- \1200_1.jpg_rotation_90.00.jpg   WATERMARK NOT DETECTED
- \1200_1.jpg_rotation_scale_-0.25.jpg   WATERMARK NOT DETECTED
- \1200_1.jpg_rotation_scale_-0.50.jpg   WATERMARK NOT DETECTED
- \1200_1.jpg_rotation_scale_-0.75.jpg   WATERMARK NOT DETECTED

Lin 1, kol 1   100%   Windows (CRLF)   UTF-8

```
*detect.log — Notatnik

Plik  Edycja  Format  Widok  Pomoc
EikonaMark batch processing detection log.
Folder: C:\Users\DragonBird\Downloads\Watermarking\Zad3\cracked\1200_1.jpg

 - \1200_1.jpg              WATERMARK DETECTED

 - \1200_1.jpg_1_row_1_col_removed.jpg          WATERMARK DETECTED

 - \1200_1.jpg_2x2_median_filter.jpg            WATERMARK DETECTED
 - \1200_1.jpg_3x3_median_filter.jpg            WATERMARK DETECTED

 - \1200_1.jpg_5_row_1_col_removed.jpg          WATERMARK DETECTED

 - \1200_1.jpg_Gaussian_filtering_3_3.jpg          WATERMARK DETECTED

 - \1200_1.jpg_Sharpening_3_3.jpg            WATERMARK DETECTED

 - \1200_1.jpg_shearing_x_1.00_y_0.00.jpg          WATERMARK DETECTED
```

Widzimy, że zmiana kolumn i wierszy jest bardziej efektywna niż przy mniejszej rozdzielczości. FMLR tutaj nie wykryło znaku

1200_2
 obraz o rozmiarze 1200x771 z osadzonym najmocniejszym znakiem wodnym;

EikonaMark batch processing detection log.
Folder: C:\Users\DragonBird\Downloads\Watermarking\Zad3\cracked\1200_2.jpg

- \1200_2.jpg   WATERMARK DETECTED
- \1200_2.jpg_17_row_5_col_removed.jpg   WATERMARK NOT DETECTED
- \1200_2.jpg_1_row_1_col_removed.jpg   WATERMARK DETECTED
- \1200_2.jpg_1_row_5_col_removed.jpg   WATERMARK DETECTED
- \1200_2.jpg_2x2_median_filter.jpg   WATERMARK DETECTED
- \1200_2.jpg_3x3_median_filter.jpg   WATERMARK DETECTED
- \1200_2.jpg_4x4_median_filter.jpg   WATERMARK DETECTED
- \1200_2.jpg_5_row_17_col_removed.jpg   WATERMARK NOT DETECTED
- \1200_2.jpg_5_row_1_col_removed.jpg   WATERMARK DETECTED
- \1200_2.jpg_cropping_1.jpg   WATERMARK NOT DETECTED
- \1200_2.jpg_cropping_10.jpg   WATERMARK NOT DETECTED
- \1200_2.jpg_cropping_15.jpg   WATERMARK NOT DETECTED
- \1200_2.jpg_cropping_2.jpg   WATERMARK NOT DETECTED
- \1200_2.jpg_cropping_20.jpg   WATERMARK NOT DETECTED
- \1200_2.jpg_cropping_25.jpg   WATERMARK NOT DETECTED
- \1200_2.jpg_cropping_5.jpg   WATERMARK NOT DETECTED
- \1200_2.jpg_cropping_50.jpg   WATERMARK NOT DETECTED
- \1200_2.jpg_cropping_75.jpg   WATERMARK NOT DETECTED
- \1200_2.jpg_FMLR.jpg   WATERMARK DETECTED
- \1200_2.jpg_Gaussian_filtering_3_3.jpg   WATERMARK DETECTED
- \1200_2.jpg_linear_1.007_0.010_0.010_1.012.jpg   WATERMARK NOT DETECTED
- \1200_2.jpg_linear_1.010_0.013_0.009_1.011.jpg   WATERMARK NOT DETECTED
- \1200_2.jpg_linear_1.013_0.008_0.011_1.008.jpg   WATERMARK NOT DETECTED
- \1200_2.jpg_ratio_x_0.80_y_1.00.jpg   WATERMARK NOT DETECTED
- \1200_2.jpg_ratio_x_0.90_y_1.00.jpg   WATERMARK NOT DETECTED
- \1200_2.jpg_ratio_x_1.00_y_0.80.jpg   WATERMARK NOT DETECTED
- \1200_2.jpg_ratio_x_1.00_y_0.90.jpg   WATERMARK NOT DETECTED
- \1200_2.jpg_ratio_x_1.00_y_1.10.jpg   WATERMARK NOT DETECTED
- \1200_2.jpg_ratio_x_1.00_y_1.20.jpg   WATERMARK NOT DETECTED
- \1200_2.jpg_ratio_x_1.10_y_1.00.jpg   WATERMARK NOT DETECTED
- \1200_2.jpg_ratio_x_1.20_y_1.00.jpg   WATERMARK NOT DETECTED
- \1200_2.jpg_rotation_-0.25.jpg   WATERMARK NOT DETECTED
- \1200_2.jpg_rotation_-0.50.jpg   WATERMARK NOT DETECTED
- \1200_2.jpg_rotation_-0.75.jpg   WATERMARK NOT DETECTED
- \1200_2.jpg_rotation_-1.00.jpg   WATERMARK NOT DETECTED
- \1200_2.jpg_rotation_-2.00.jpg   WATERMARK NOT DETECTED
- \1200_2.jpg_rotation_0.25.jpg   WATERMARK NOT DETECTED
- \1200_2.jpg_rotation_0.50.jpg   WATERMARK NOT DETECTED
- \1200_2.jpg_rotation_0.75.jpg   WATERMARK NOT DETECTED
- \1200_2.jpg_rotation_1.00.jpg   WATERMARK NOT DETECTED
- \1200_2.jpg_rotation_10.00.jpg   WATERMARK NOT DETECTED
- \1200_2.jpg_rotation_15.00.jpg   WATERMARK NOT DETECTED
- \1200_2.jpg_rotation_2.00.jpg   WATERMARK NOT DETECTED
- \1200_2.jpg_rotation_30.00.jpg   WATERMARK NOT DETECTED
- \1200_2.jpg_rotation_45.00.jpg   WATERMARK NOT DETECTED
- \1200_2.jpg_rotation_5.00.jpg   WATERMARK NOT DETECTED
- \1200_2.jpg_rotation_90.00.jpg   WATERMARK NOT DETECTED
- \1200_2.jpg_rotation_scale_-0.25.jpg   WATERMARK NOT DETECTED
- \1200_2.jpg_rotation_scale_-0.50.jpg   WATERMARK NOT DETECTED
- \1200_2.jpg_rotation_scale_-0.75.jpg   WATERMARK NOT DETECTED

```
*detect.log — Notatnik
Plik  Edycja  Format  Widok  Pomoc
EikonaMark batch processing detection log.
Folder: C:\Users\DragonBird\Downloads\Watermarking\Zad3\cracked\1200_2.jpg

 - \1200_2.jpg              WATERMARK DETECTED
 - \1200_2.jpg_1_row_1_col_removed.jpg        WATERMARK DETECTED
 - \1200_2.jpg_1_row_5_col_removed.jpg        WATERMARK DETECTED
 - \1200_2.jpg_2x2_median_filter.jpg          WATERMARK DETECTED
 - \1200_2.jpg_3x3_median_filter.jpg          WATERMARK DETECTED
 - \1200_2.jpg_4x4_median_filter.jpg          WATERMARK DETECTED
 - \1200_2.jpg_5_row_1_col_removed.jpg        WATERMARK DETECTED
 - \1200_2.jpg_FMLR.jpg        WATERMARK DETECTED
 - \1200_2.jpg_Gaussian_filtering_3_3.jpg              WATERMARK DETECTED
 - \1200_2.jpg_Sharpening_3_3.jpg          WATERMARK DETECTED
 - \1200_2.jpg_shearing_x_0.00_y_1.00.jpg              WATERMARK DETECTED
 - \1200_2.jpg_shearing_x_1.00_y_0.00.jpg              WATERMARK DETECTED
```

Tutaj zdecydowanie możemy zauważyć różnice w wykrywaniu znaku wodnego w porównaniu do wcześniejszych przykładów.

Wnioski:
1. Przy większej rozdzielczości łatwiej jest wykryć ukryty wcześniej znak wodny.
2. Siła znaku nie wpływa istotnie na jego wykrycie przy małych rozdzielczościach
3. Łatwiej zabezpieczyć plik obraz jeżeli jest on w dużej rozdzielczości.
4. Metody które działały na każdym z powyższych przykładów to : metoda gaussa, filtru średniego, usuwania kolumn i wierszy.
5. Przy pliku o małej rozdzielczości i silnym znaku wodnym skuteczna była metoda rotacji (i tylko tam biorąc pod uwagę wszystkie powyższe przykłady)
6. Metody nie działające na żadnym pliku to : cropping i metoda liniowa.