

Origin & gray



2D-DCT & 2D-iDCT



1D-DCT & 1D-iDCT



2D-DCT time: 1981 sec
2D-iDCT time: 2635 sec
2D-iDCT PSNR: 28.23552

1D-DCT time: 5sec
1D-iDCT time: 5sec
1D-iDCT PSNR: 274.56385

2D-DCT time: 1981 sec
2D-iDCT time: 2635 sec
2D-iDCT PSNR: 28.23552

1D-DCT time: 5sec
1D-iDCT time: 5sec
1D-iDCT PSNR: 274.56385

```
(VCHW2) → hw2 git:(main) X python main.py
100%|██████████████████████████████████████████| 512/512 [00:02<00:00, 200.18it/s]
100%|██████████████████████████████████████████| 512/512 [00:02<00:00, 182.79it/s]
Runtime for 1D-DCT: 5.361378 seconds
100%|██████████████████████████████████████████| 262144/262144 [33:01<00:00, 132.28it/s]
Runtime for 2D-DCT: 1981.801981 seconds
100%|██████████████████████████████████████████| 512/512 [00:02<00:00, 221.18it/s]
100%|██████████████████████████████████████████| 512/512 [00:02<00:00, 198.39it/s]
Runtime for 1D-iDCT: 4.896072 seconds
PSNR: 274.56385 dB
100%|██████████████████████████████████████████| 262144/262144 [43:55<00:00, 99.48it/s]
Runtime for 2D-iDCT: 2635.273579 seconds
PSNR: 28.23552 dB
```