

# アニメ作画を自動化させよう

## 出力画像

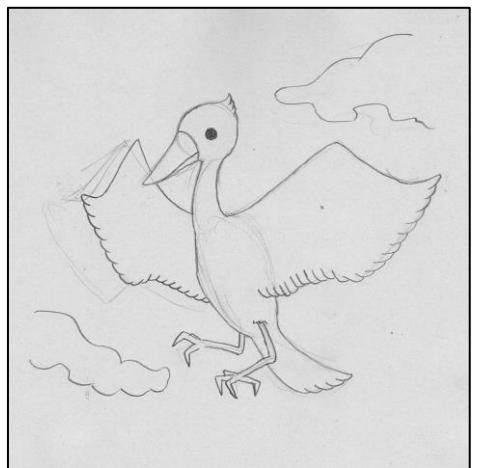
鹿児島大学 工学部 情報生体システム工学科  
鹿嶋研 塩谷維織  
指導教員 鹿嶋雅之 准教授

# 説明

- 以下のスライドの画像を見て次のURLのページの質問に答えてください。
  - <https://forms.gle/iSWJ88Q1ZZA3sjhDA>

# 評価実験用画像

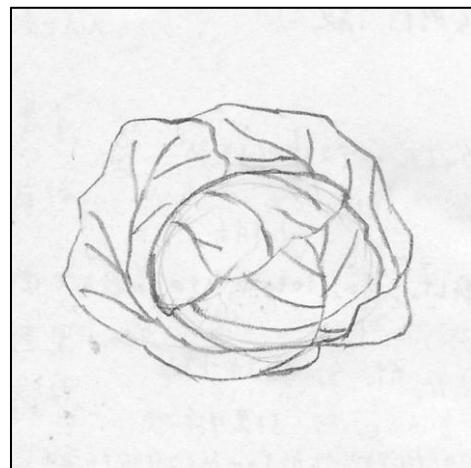
- 12枚×高さ・幅1000px,720px,320px3種類(計36枚)



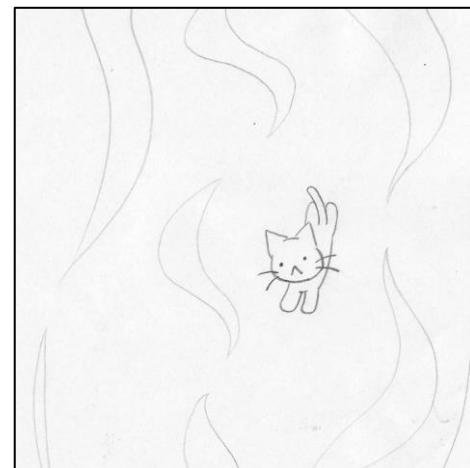
bird.png



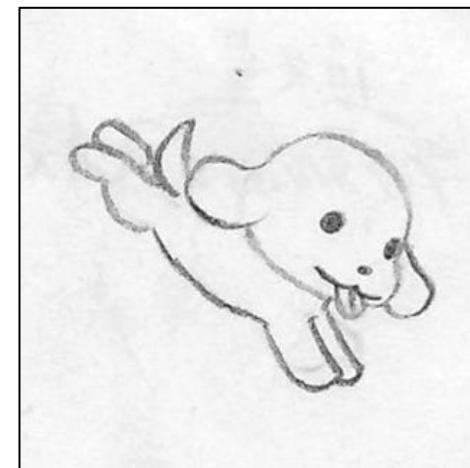
box.png



cabbage.png



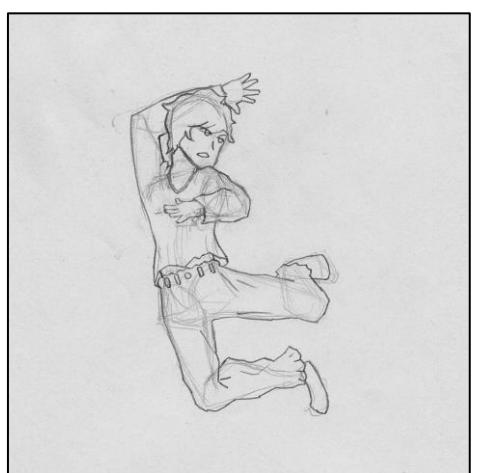
cat.png



dog.png



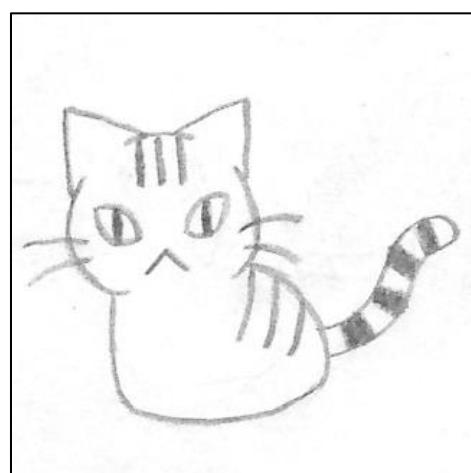
face.png



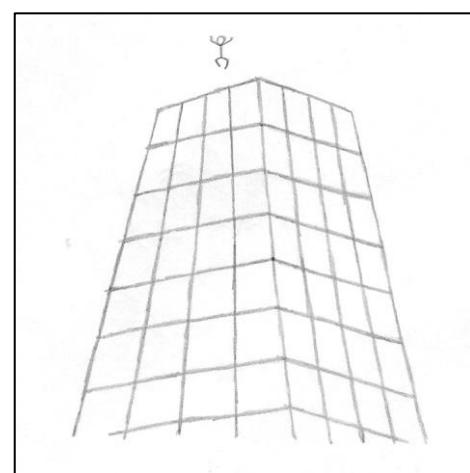
jump.png



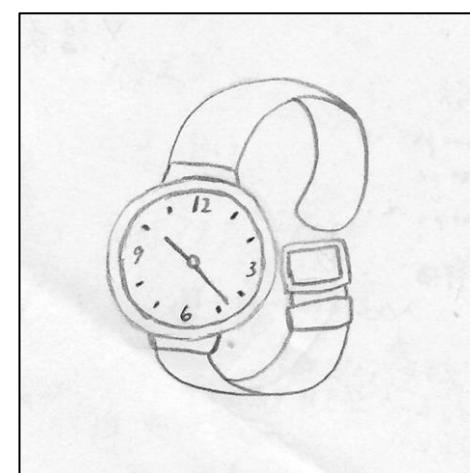
man.png



tabby.png



tower.png

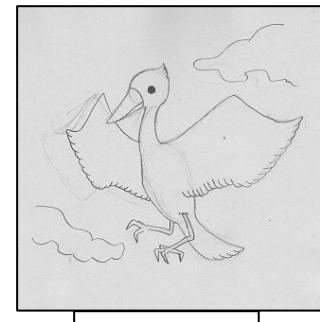


watch.png

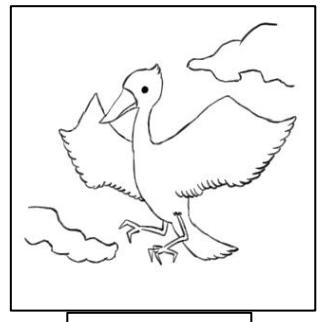


woman.png

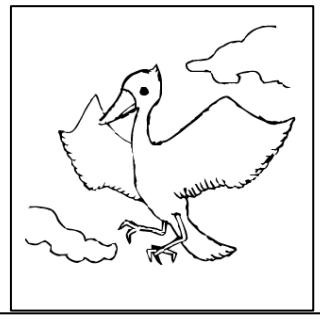
# bird320.png



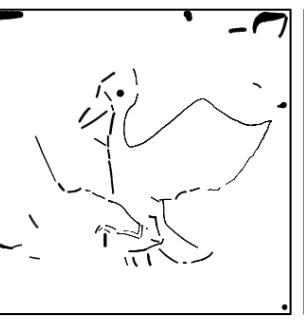
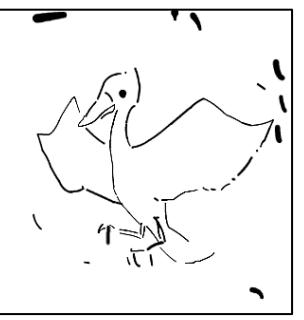
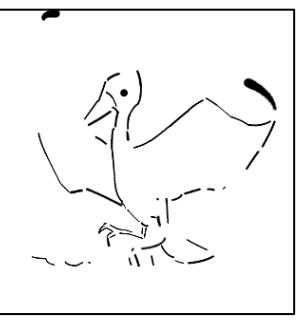
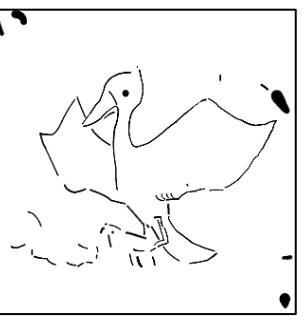
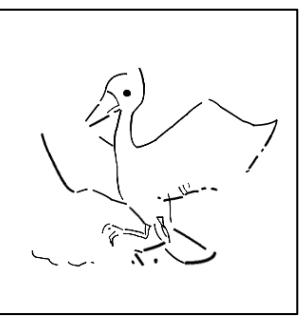
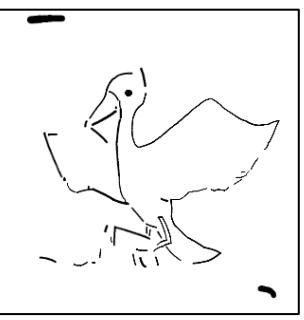
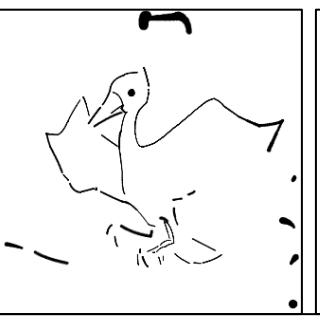
元画像



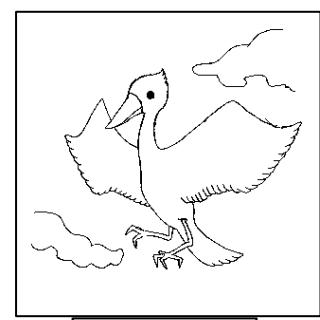
手描き



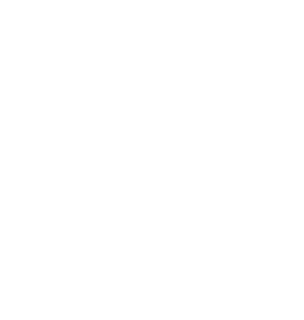
Adobe Illustrator



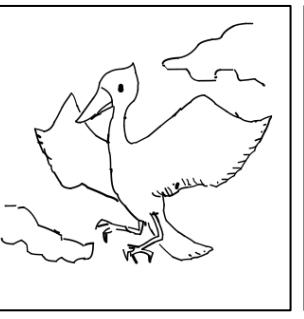
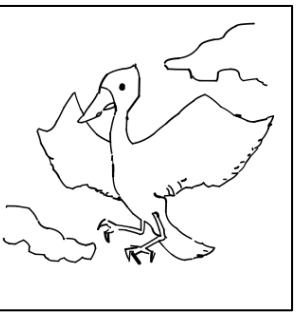
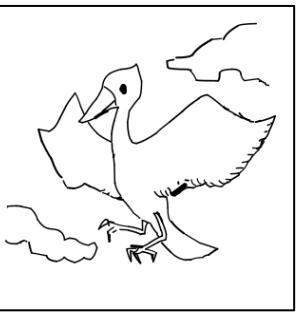
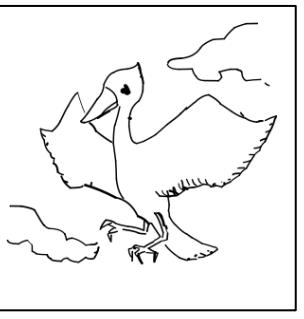
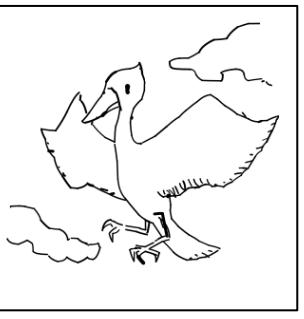
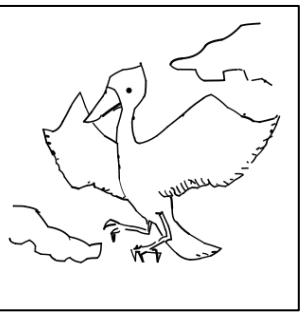
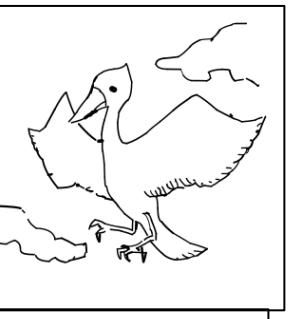
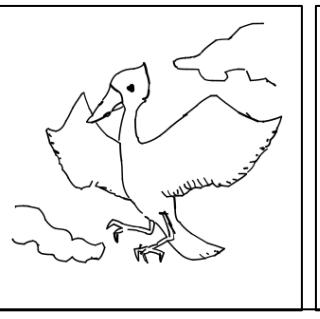
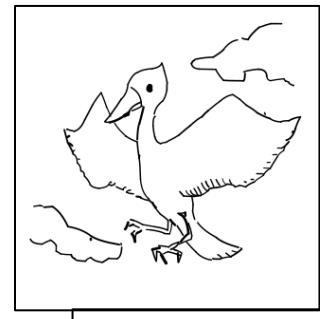
元画像を"test\_vectorization.py"で処理



前処理



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前処理+"test\_vectorization.py"+後処理

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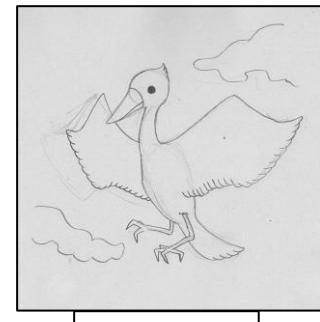
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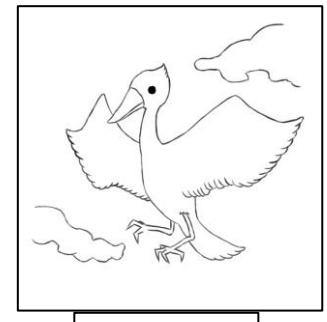
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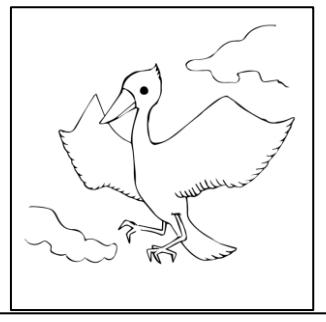
# bird720.png



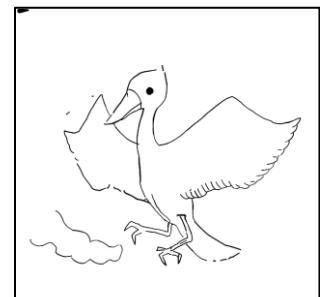
元画像



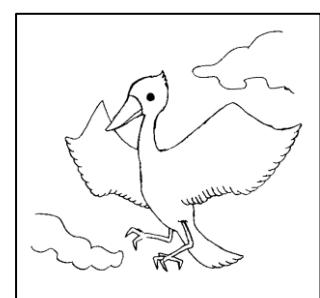
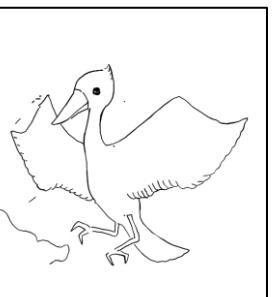
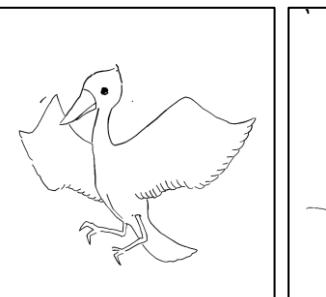
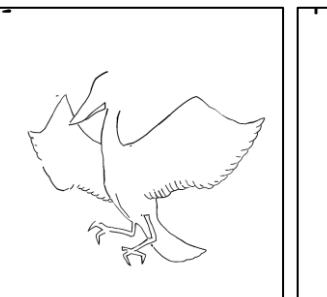
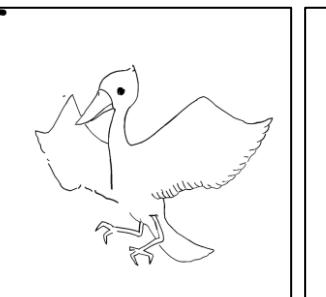
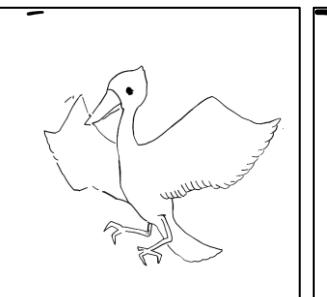
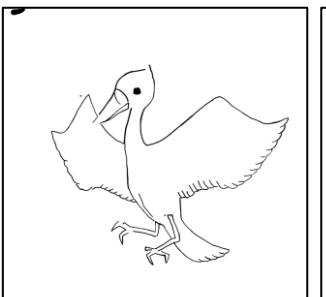
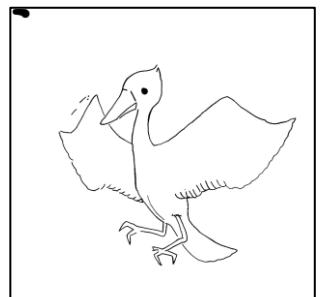
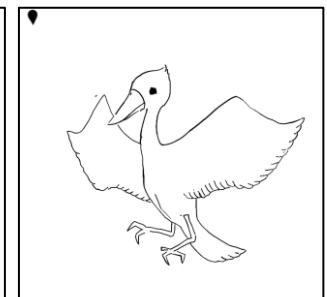
手描き



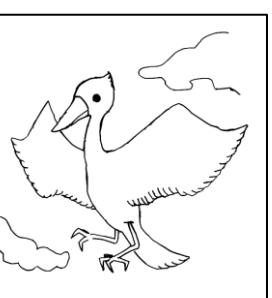
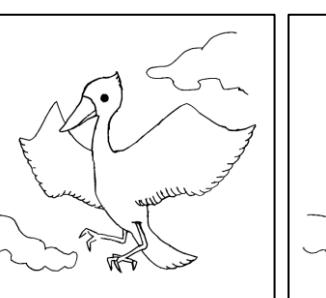
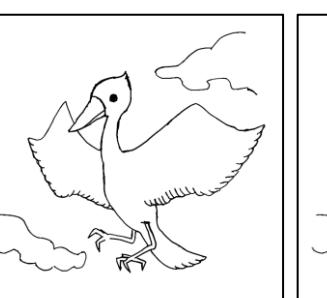
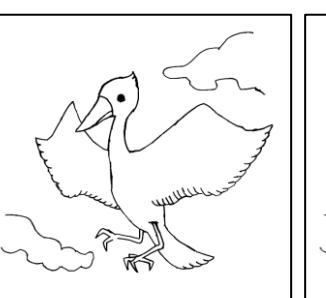
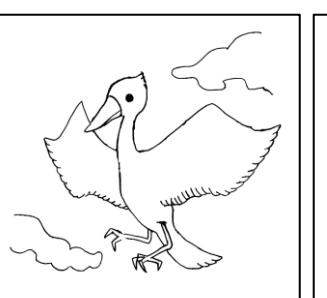
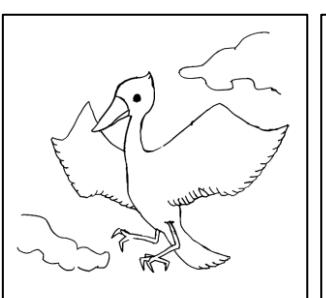
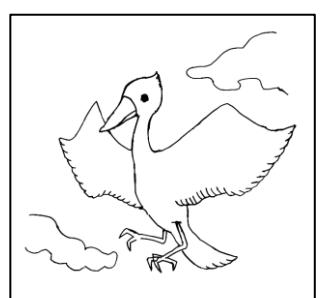
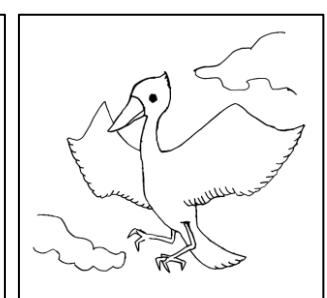
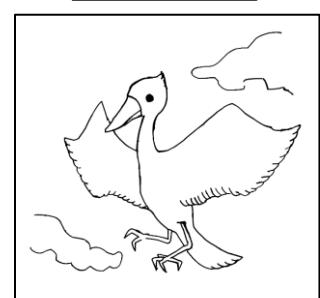
Adobe Illustrator



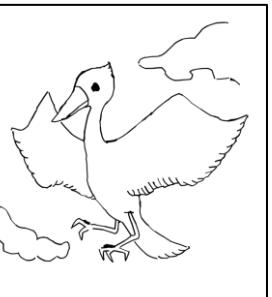
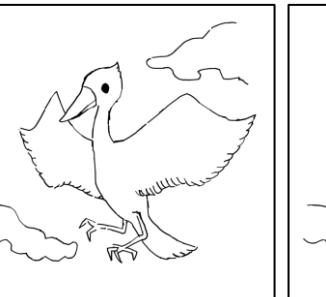
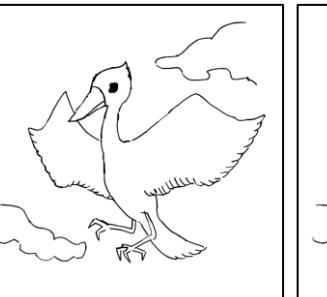
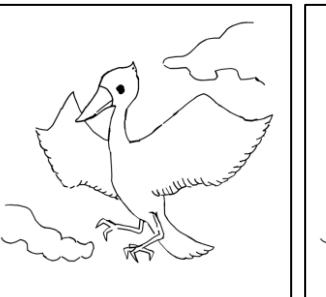
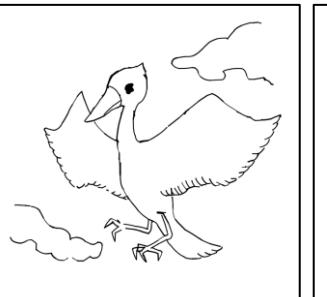
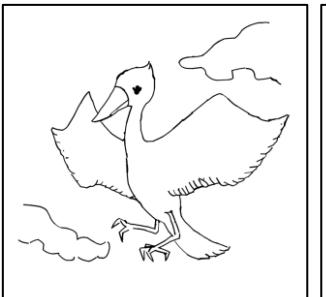
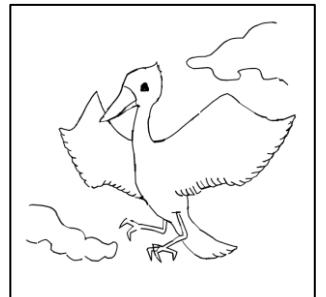
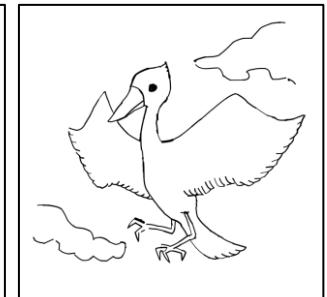
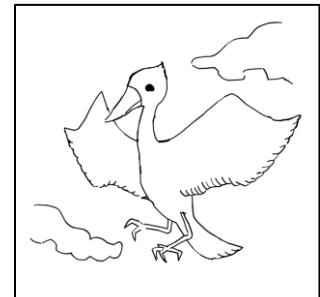
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前処理



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前処理+"test\_vectorization.py"+後処理

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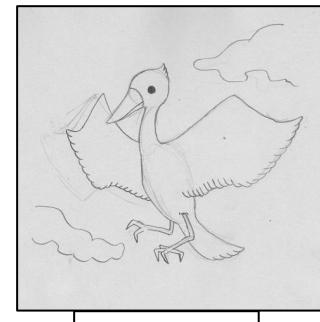
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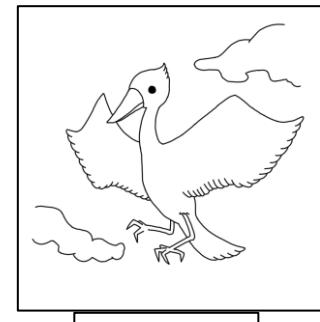
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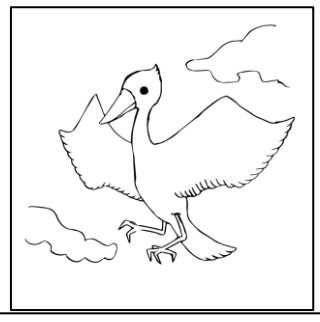
bird1000.png



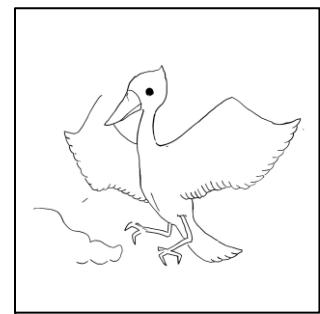
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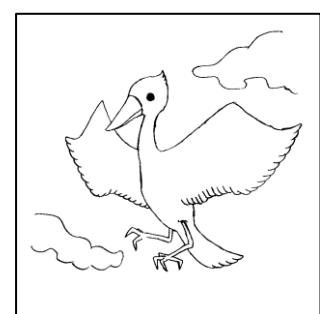
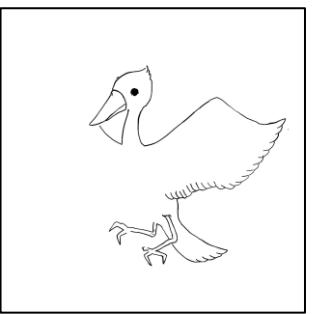
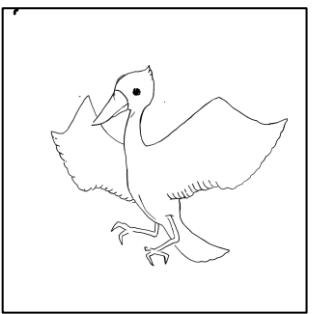
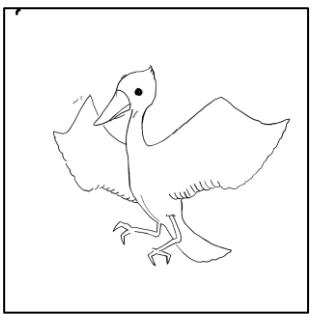
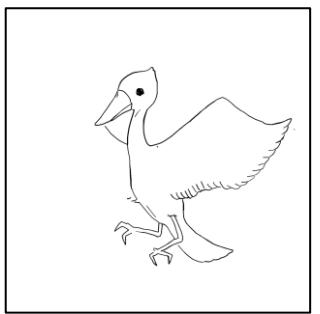
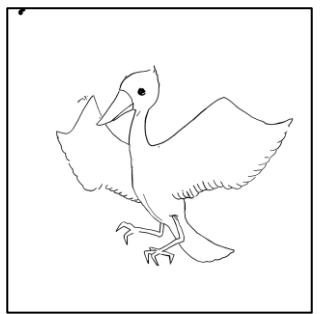
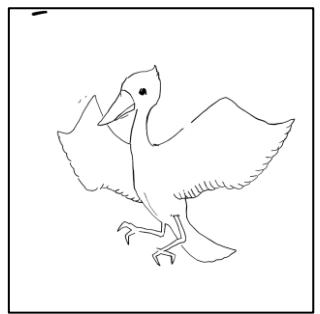
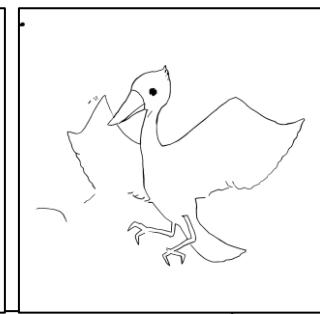
手描き



Adobe Illustrator



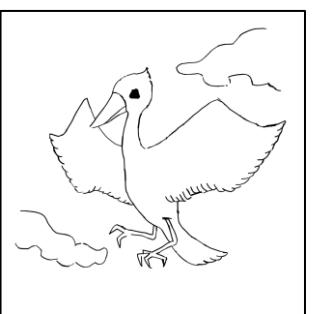
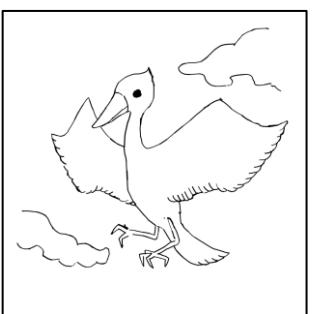
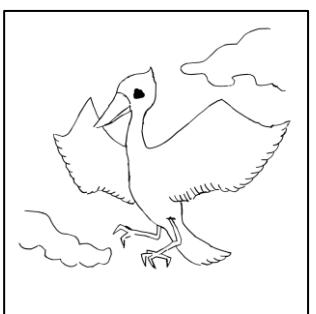
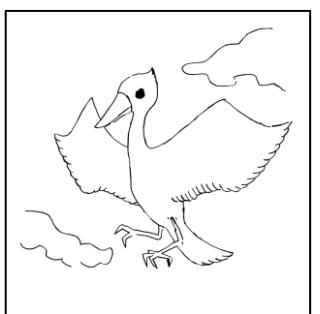
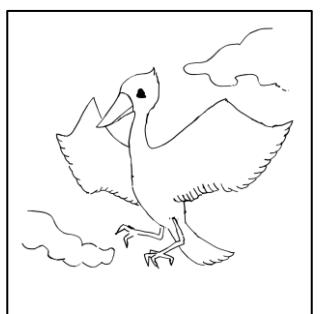
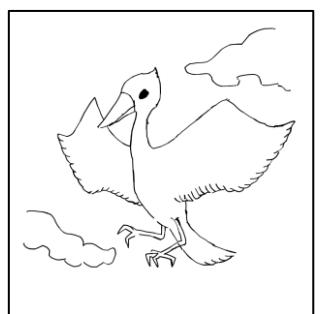
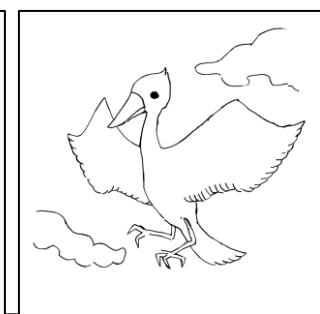
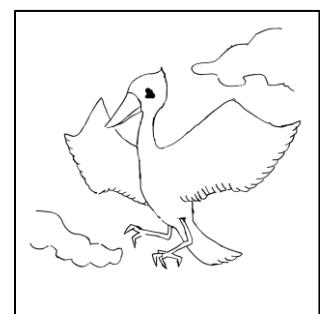
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前処理



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前処理+"test\_vectorization.py"+後処理

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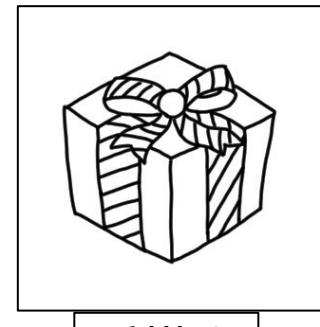
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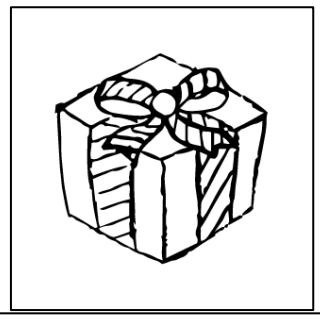
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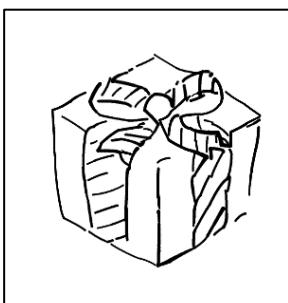
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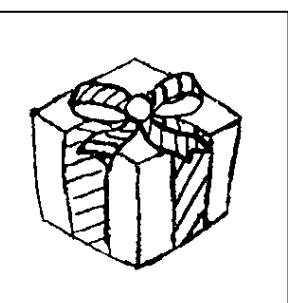
手描き



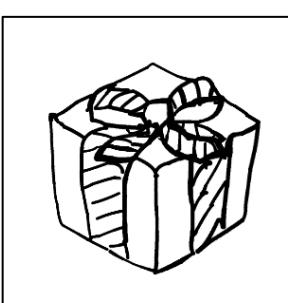
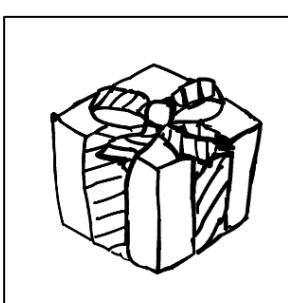
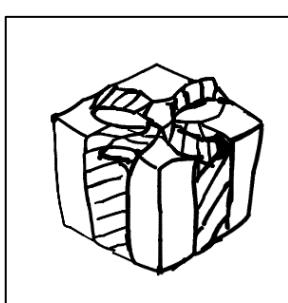
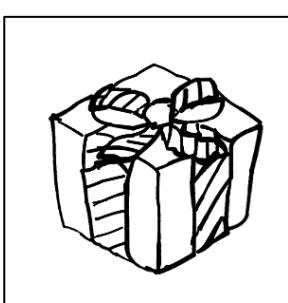
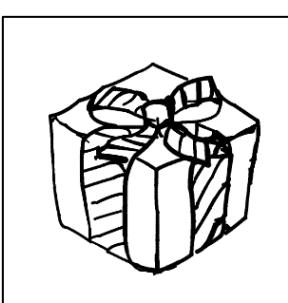
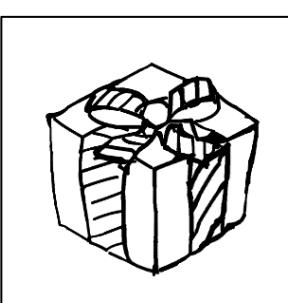
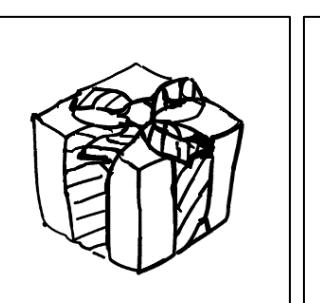
Adobe Illustrator



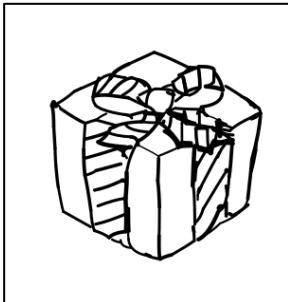
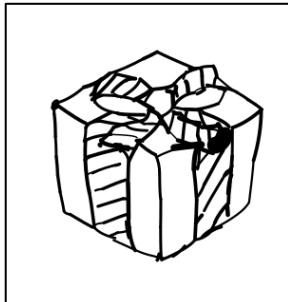
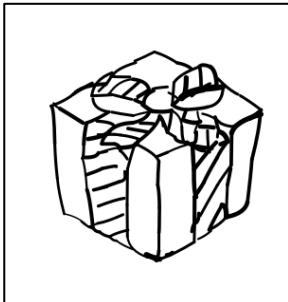
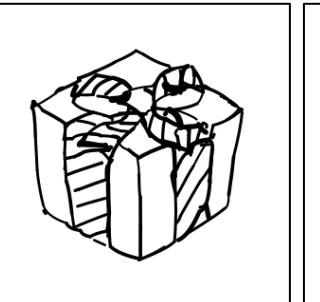
元画像を"test\_vectorization.py"で処理



前処理



前処理+"test\_vectorization.py"



前処理+"test\_vectorization.py"+後処理

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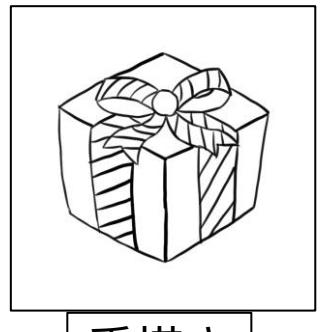
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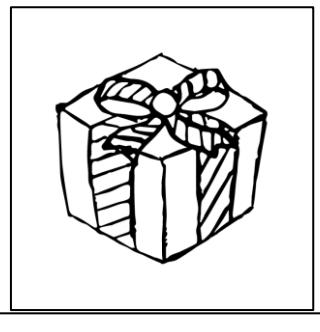
box720.png



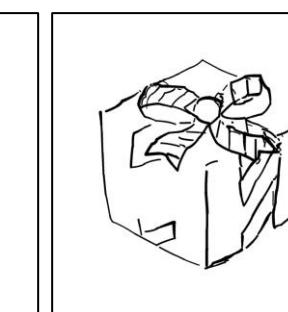
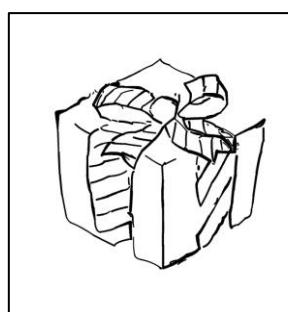
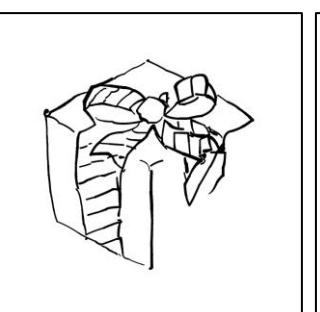
元画像



手描き



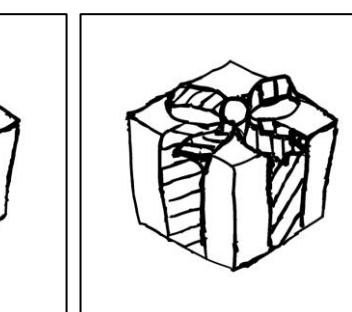
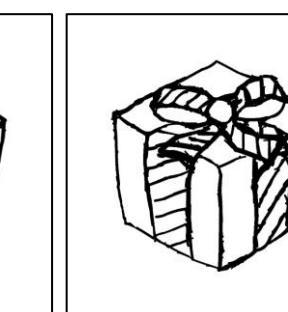
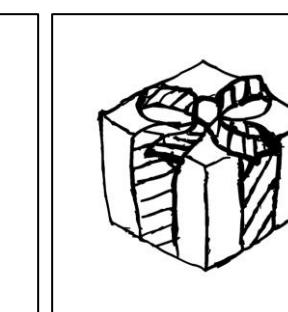
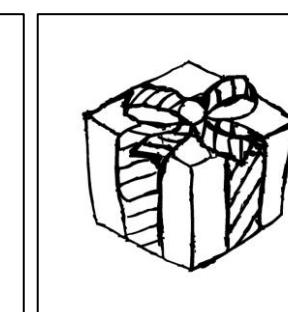
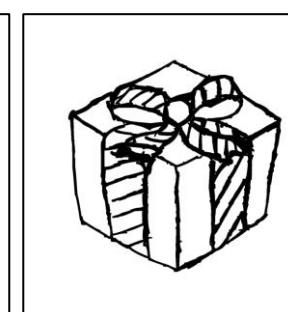
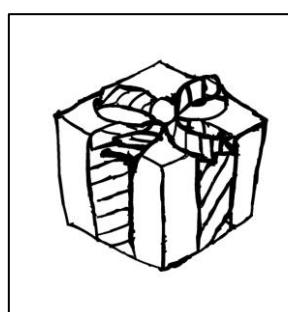
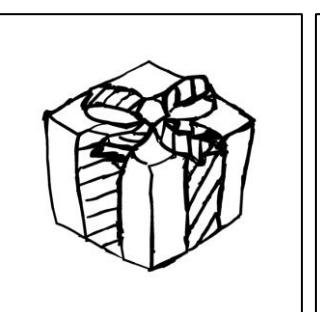
Adobe Illustrator



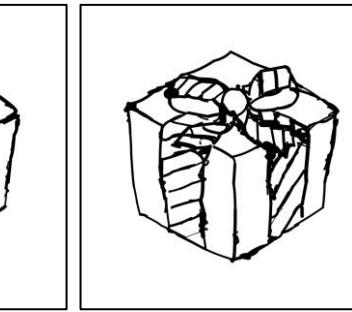
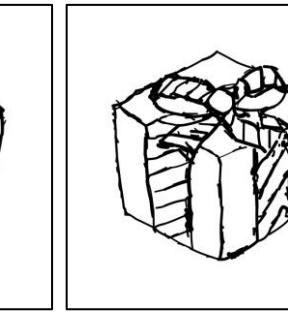
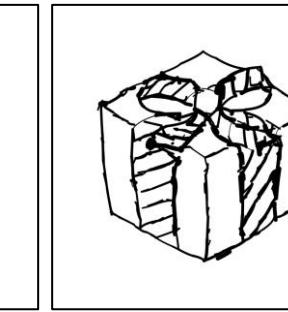
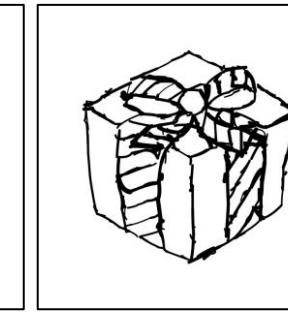
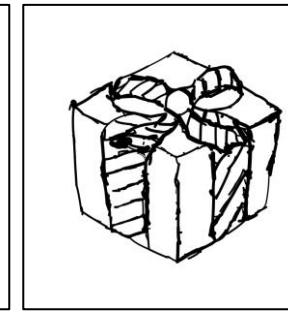
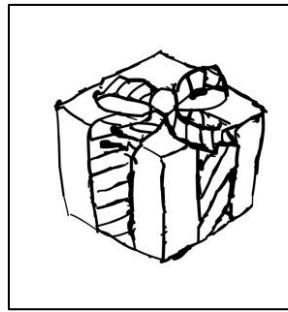
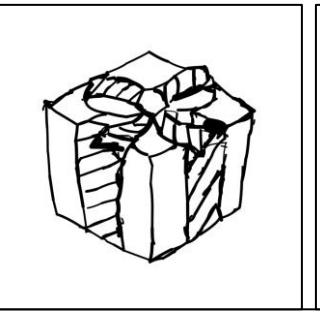
元画像を"test\_vectorization.py"で処理



前処理



前処理+"test\_vectorization.py"



前処理+"test\_vectorization.py"+後処理

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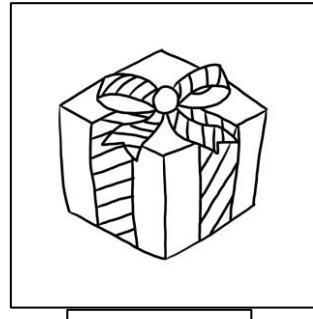
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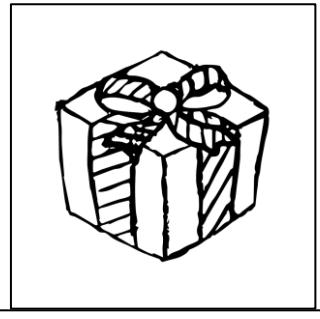
box1000.png



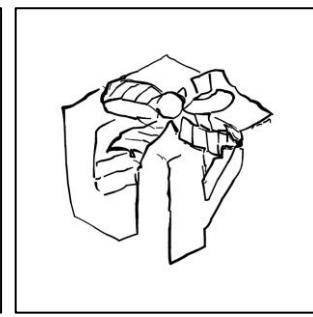
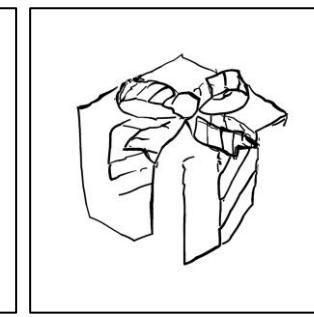
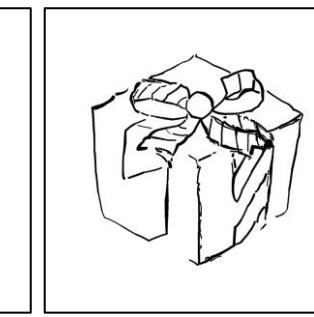
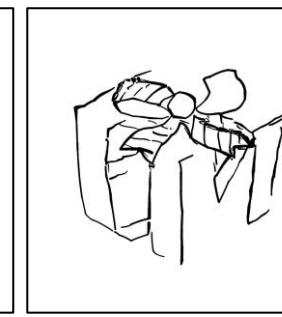
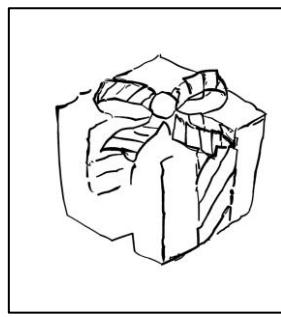
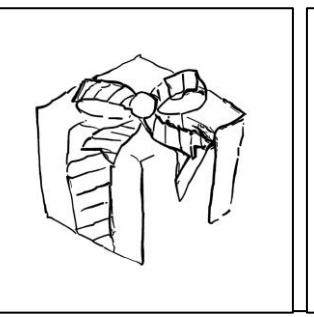
元画像



手描き



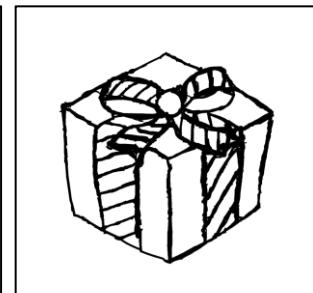
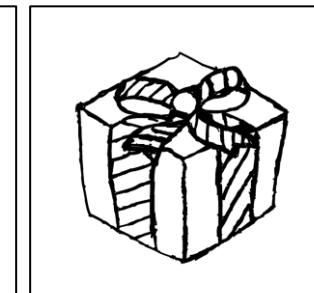
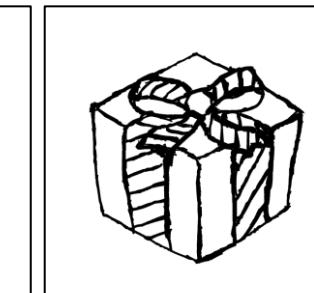
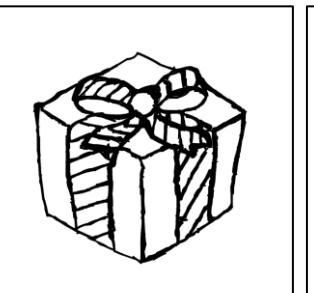
Adobe Illustrator



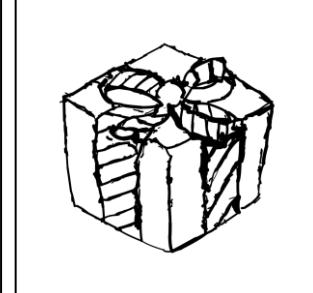
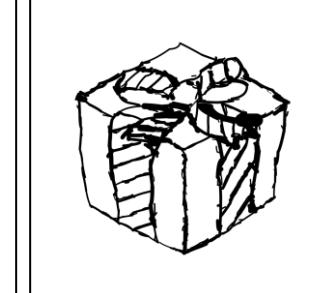
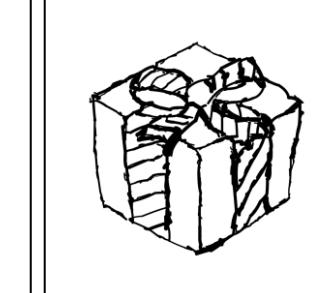
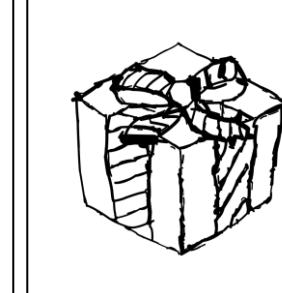
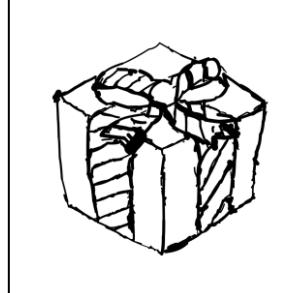
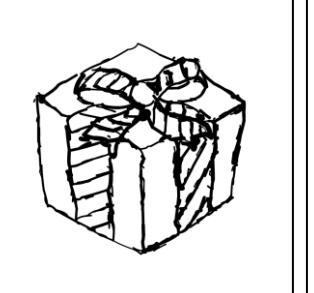
元画像を"test\_vectorization.py"で処理



前処理



前処理+"test\_vectorization.py"



前処理+"test\_vectorization.py"+後処理

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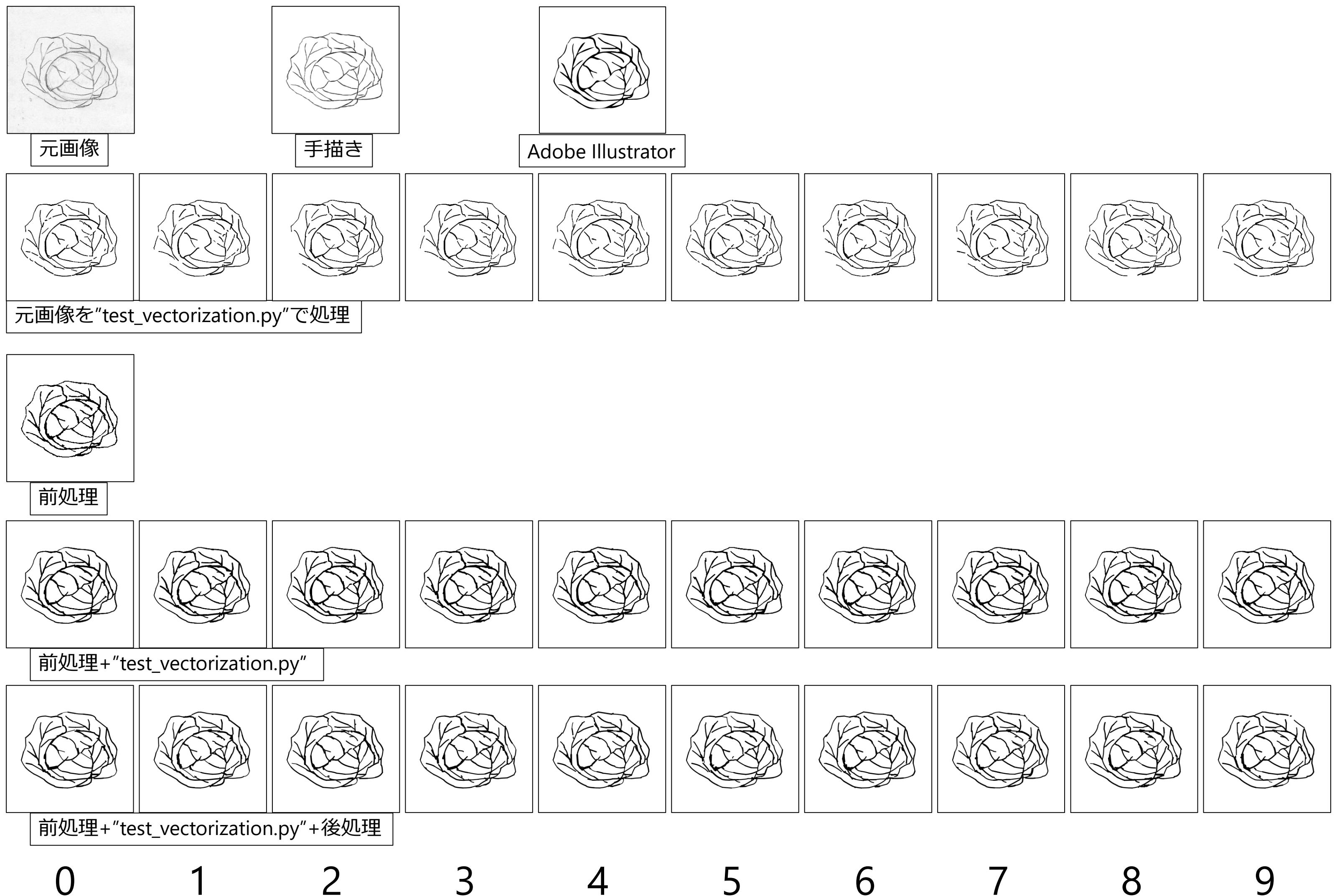
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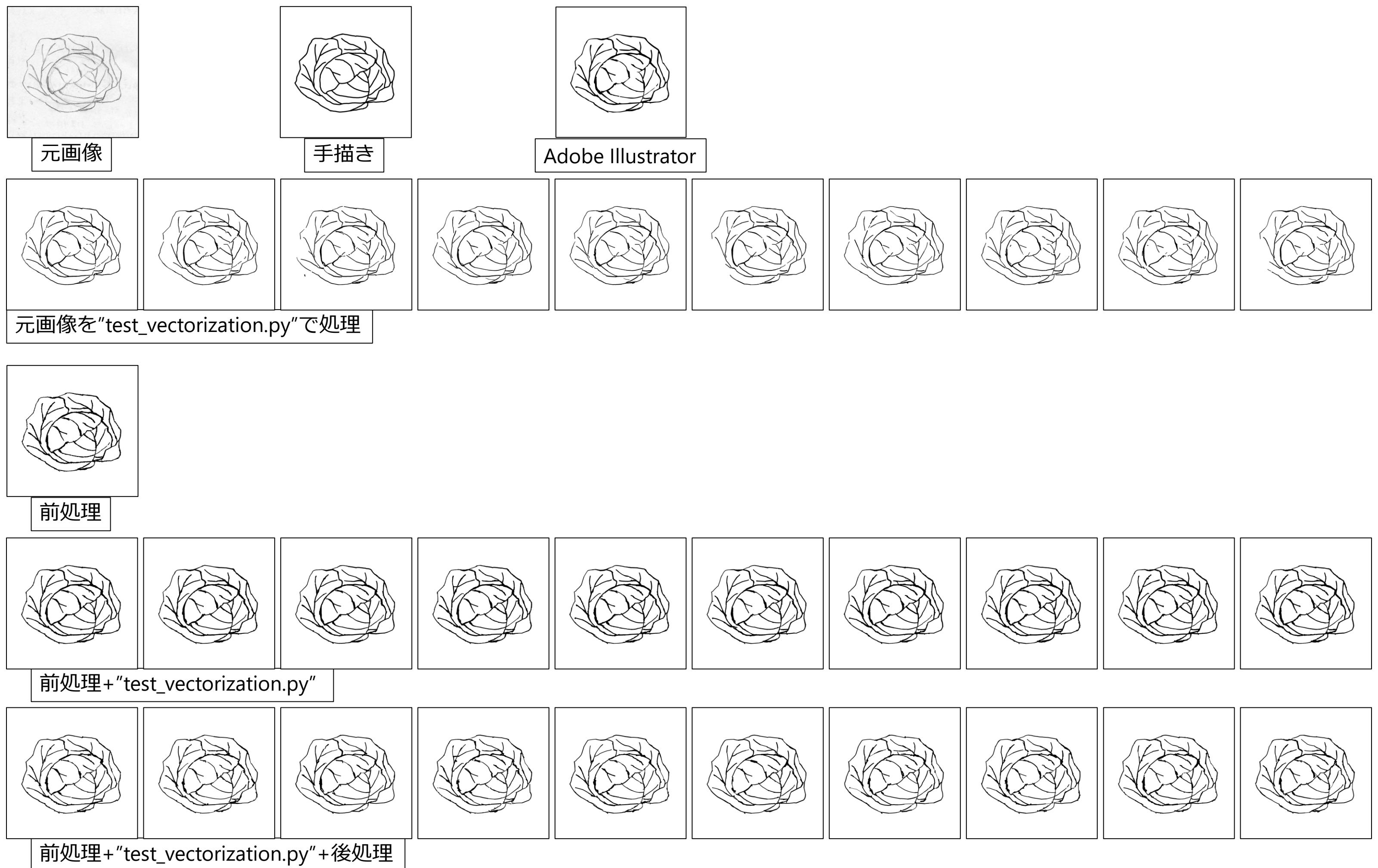
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cabbage320.png



cabbage720.png



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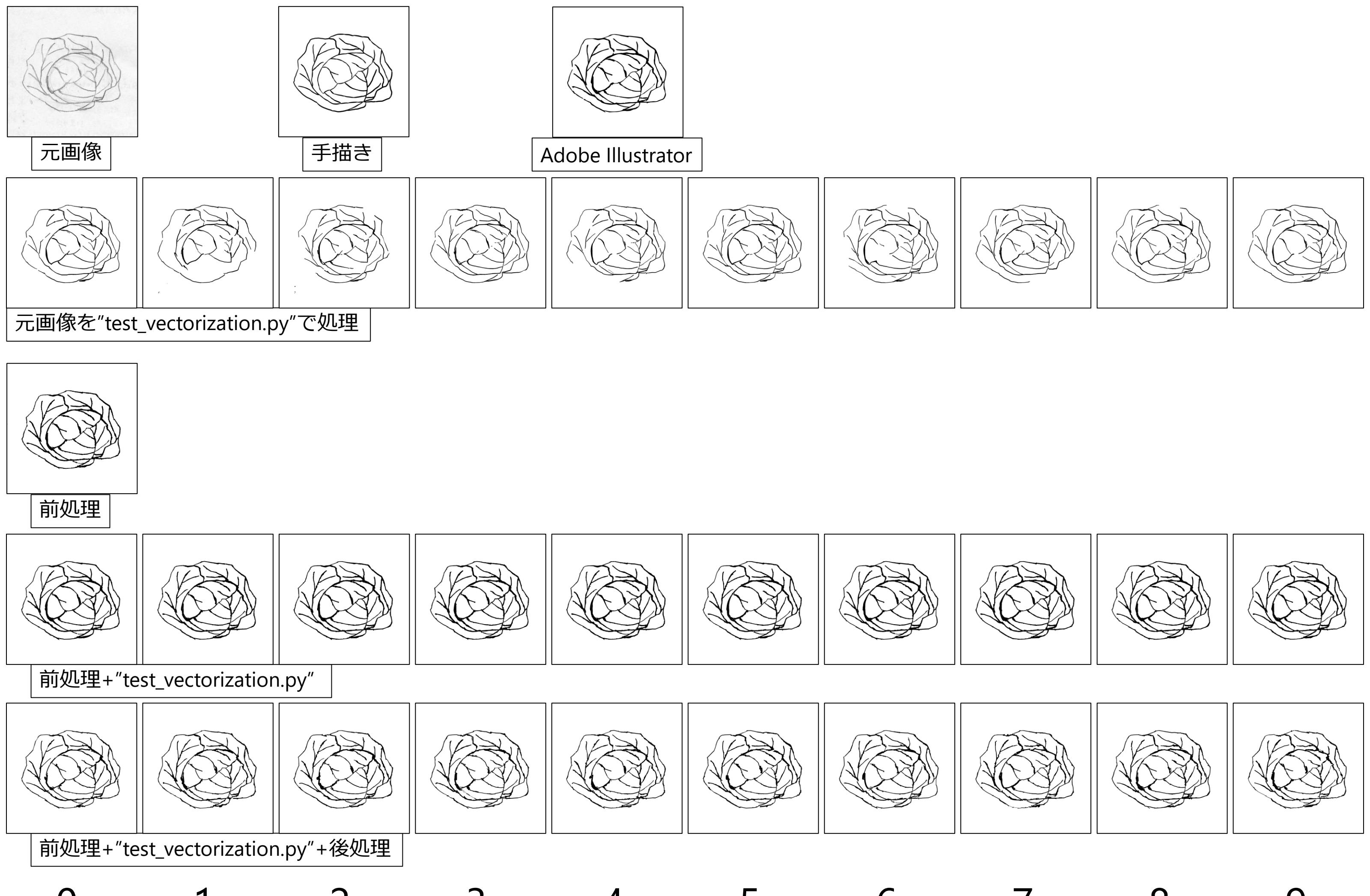
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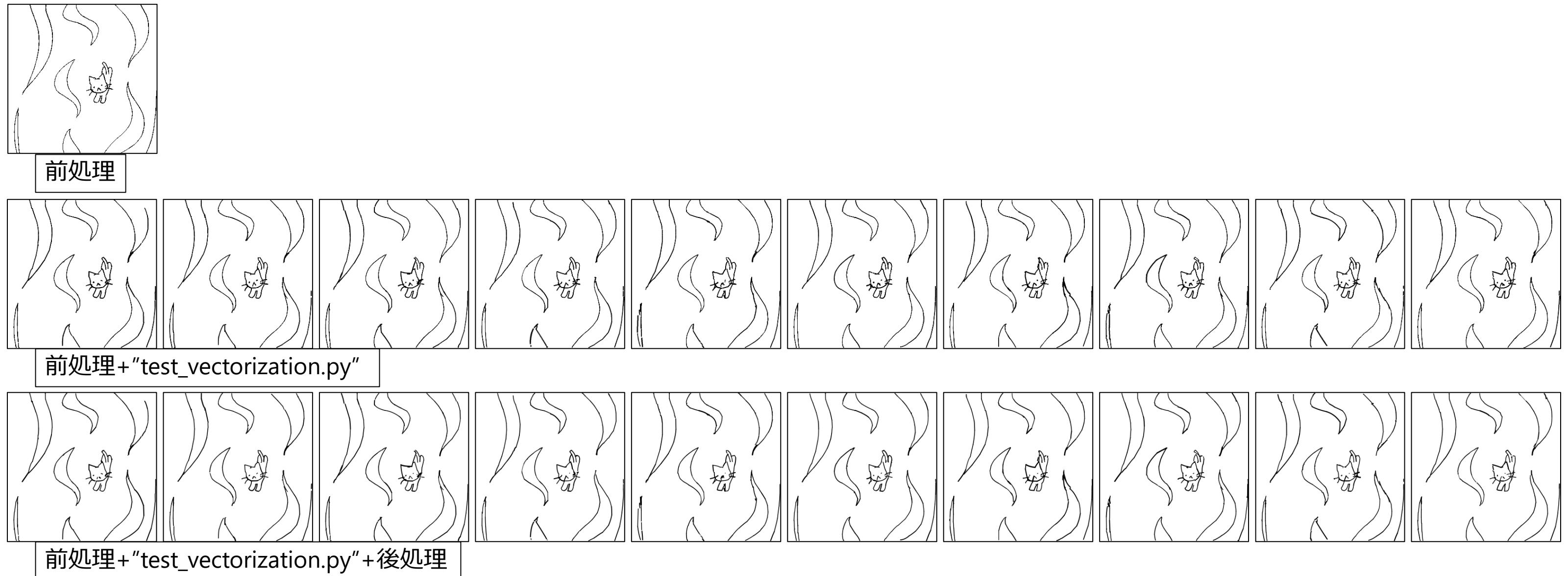
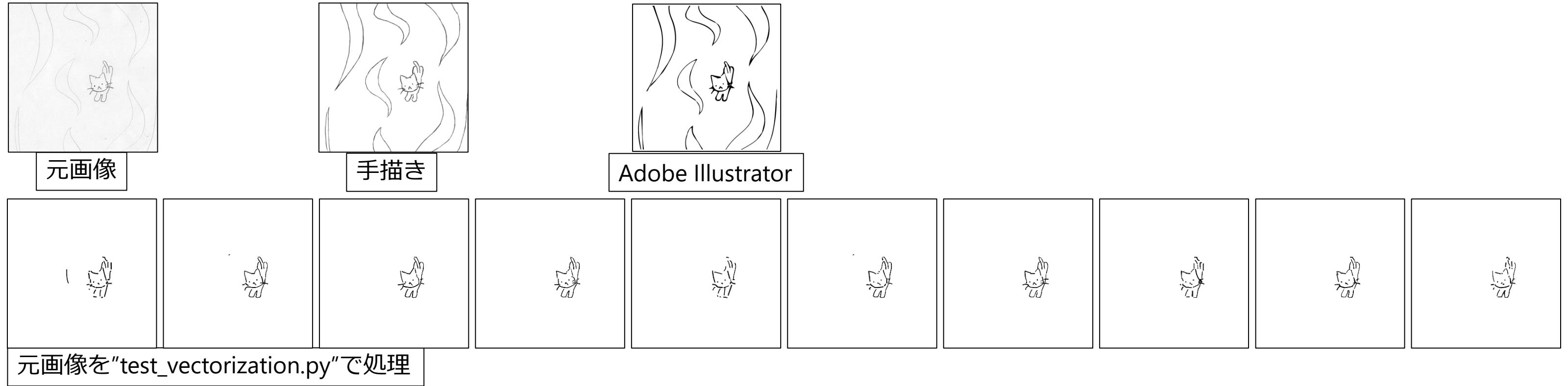
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# cabbage1020.png



# cat320.png



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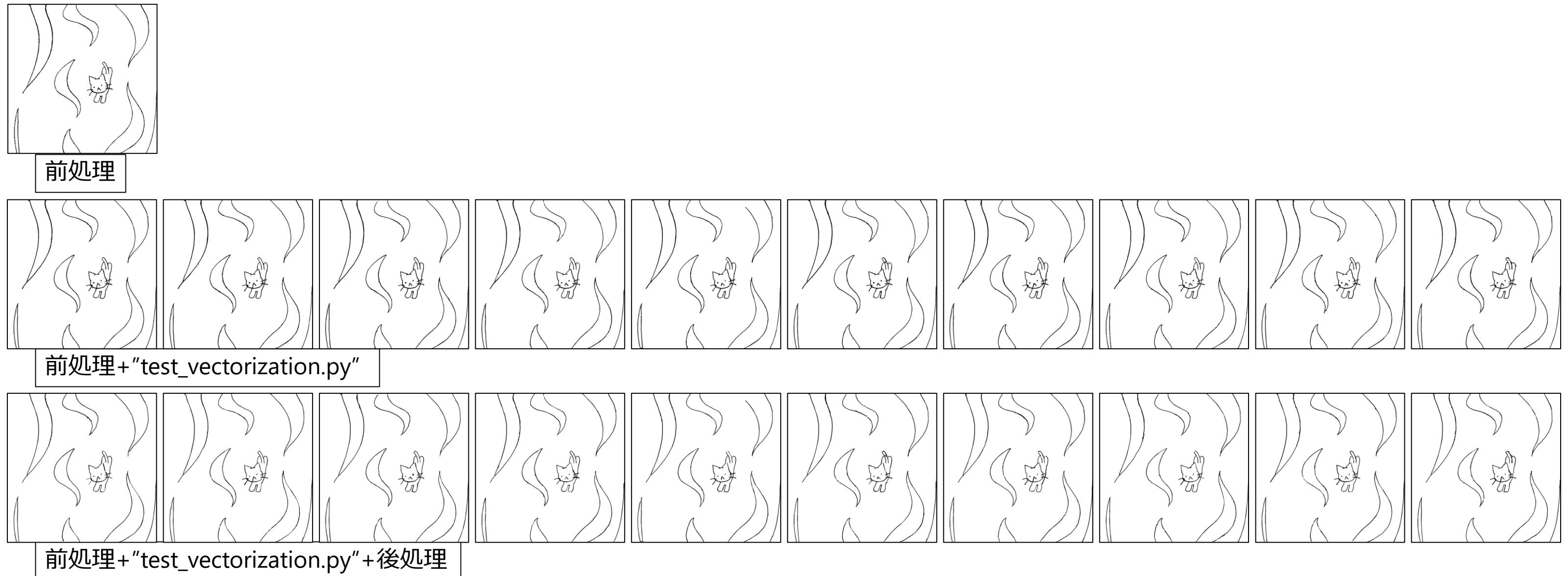
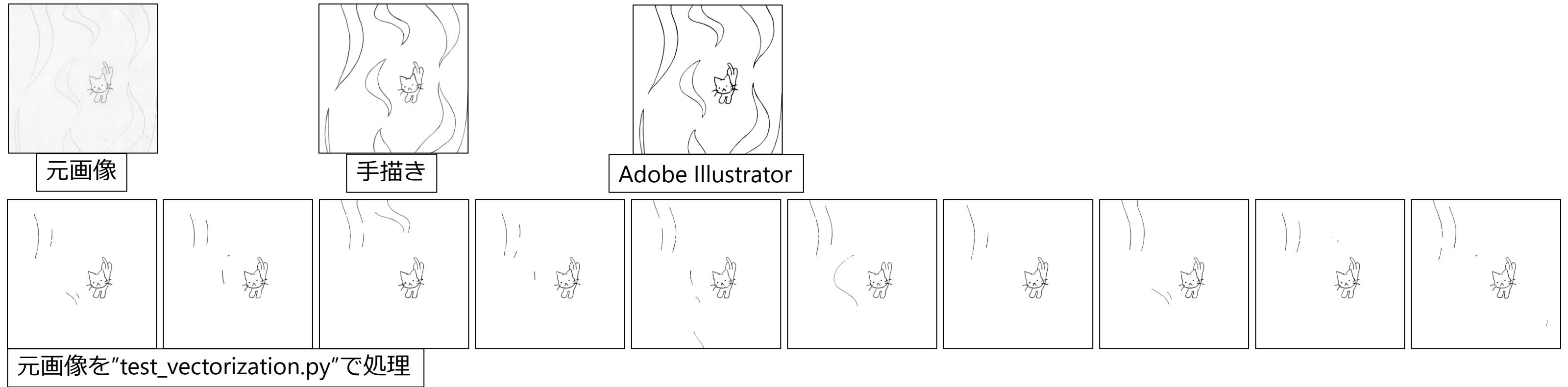
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cat720.png



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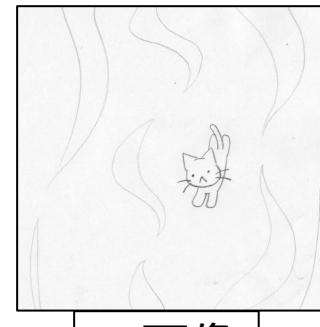
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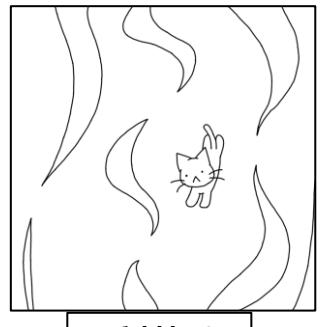
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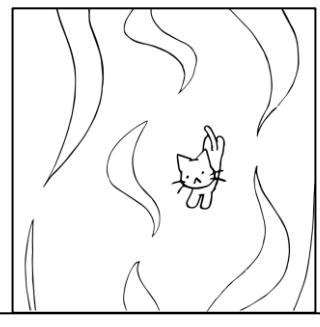
# cat1000.png



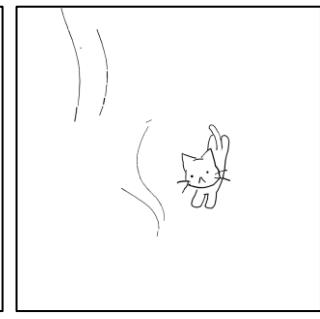
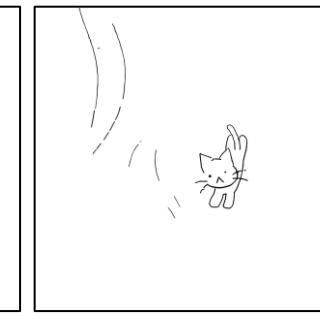
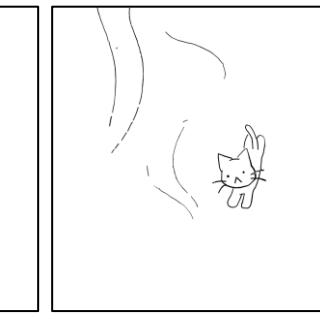
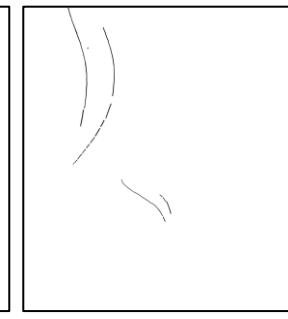
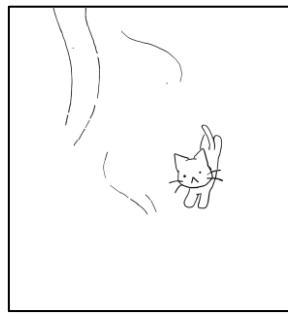
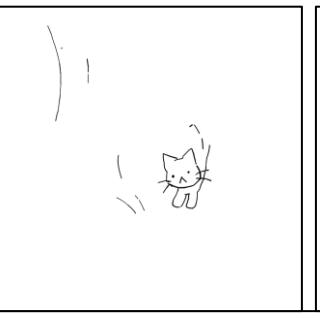
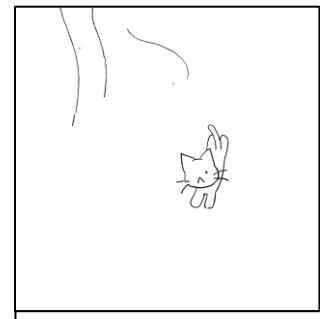
元画像



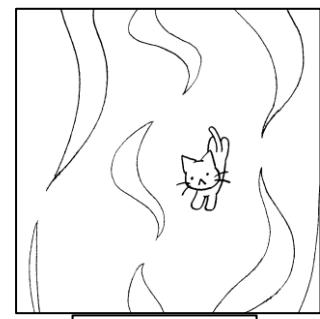
手描き



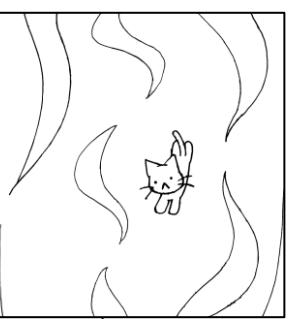
Adobe Illustrator



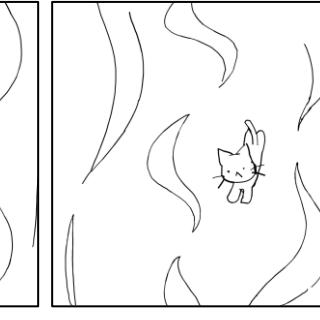
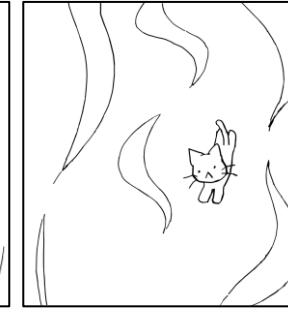
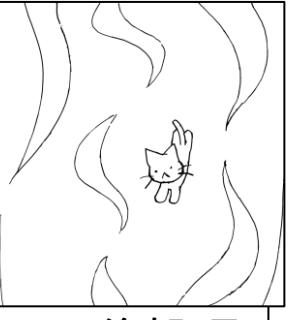
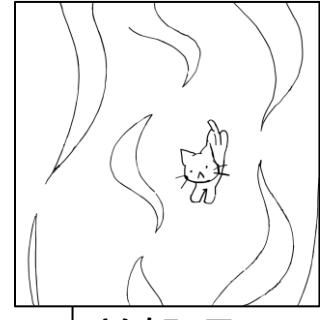
元画像を"test\_vectorization.py"で処理



前処理



前処理+"test\_vectorization.py"



前処理+"test\_vectorization.py"+後処理

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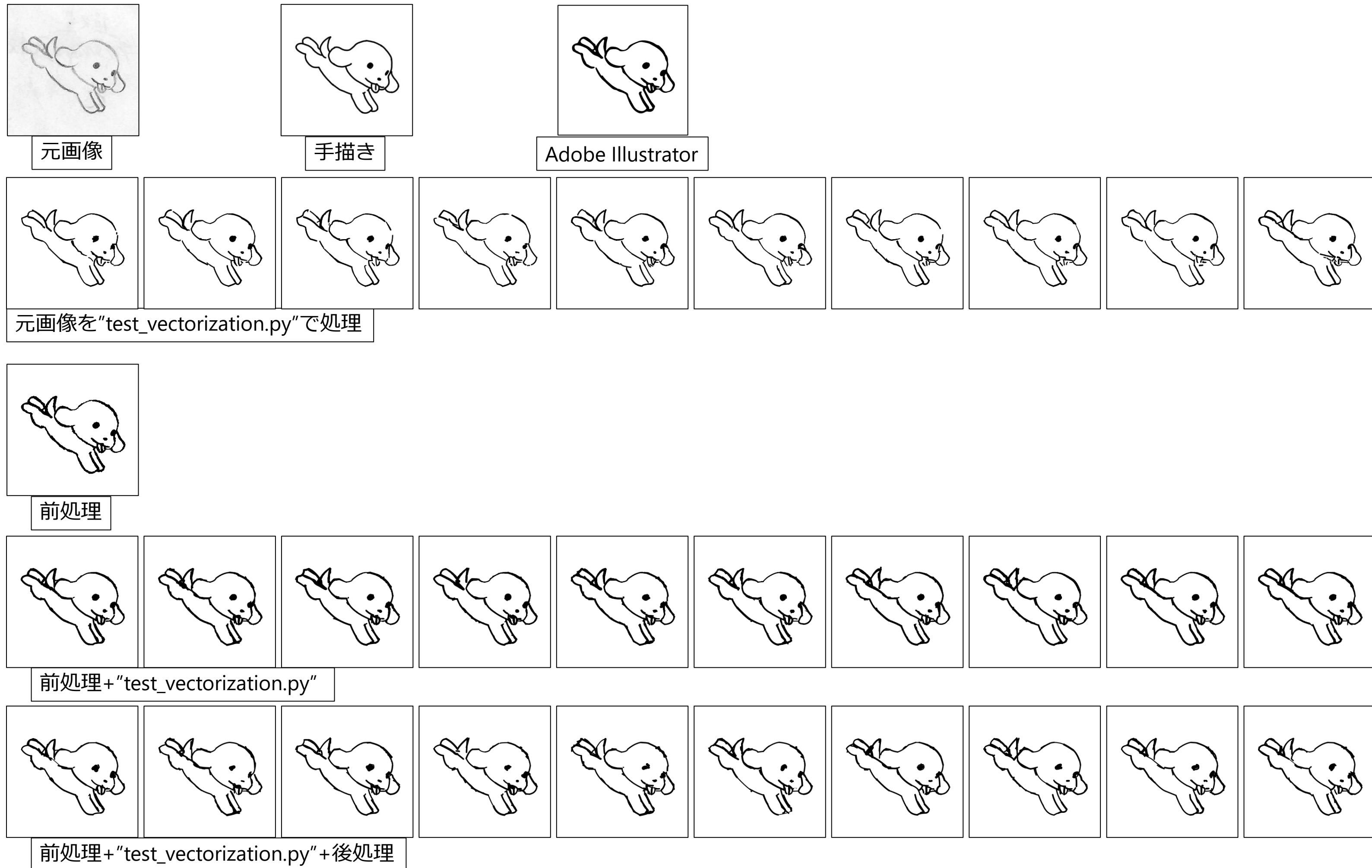
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# dog320.png



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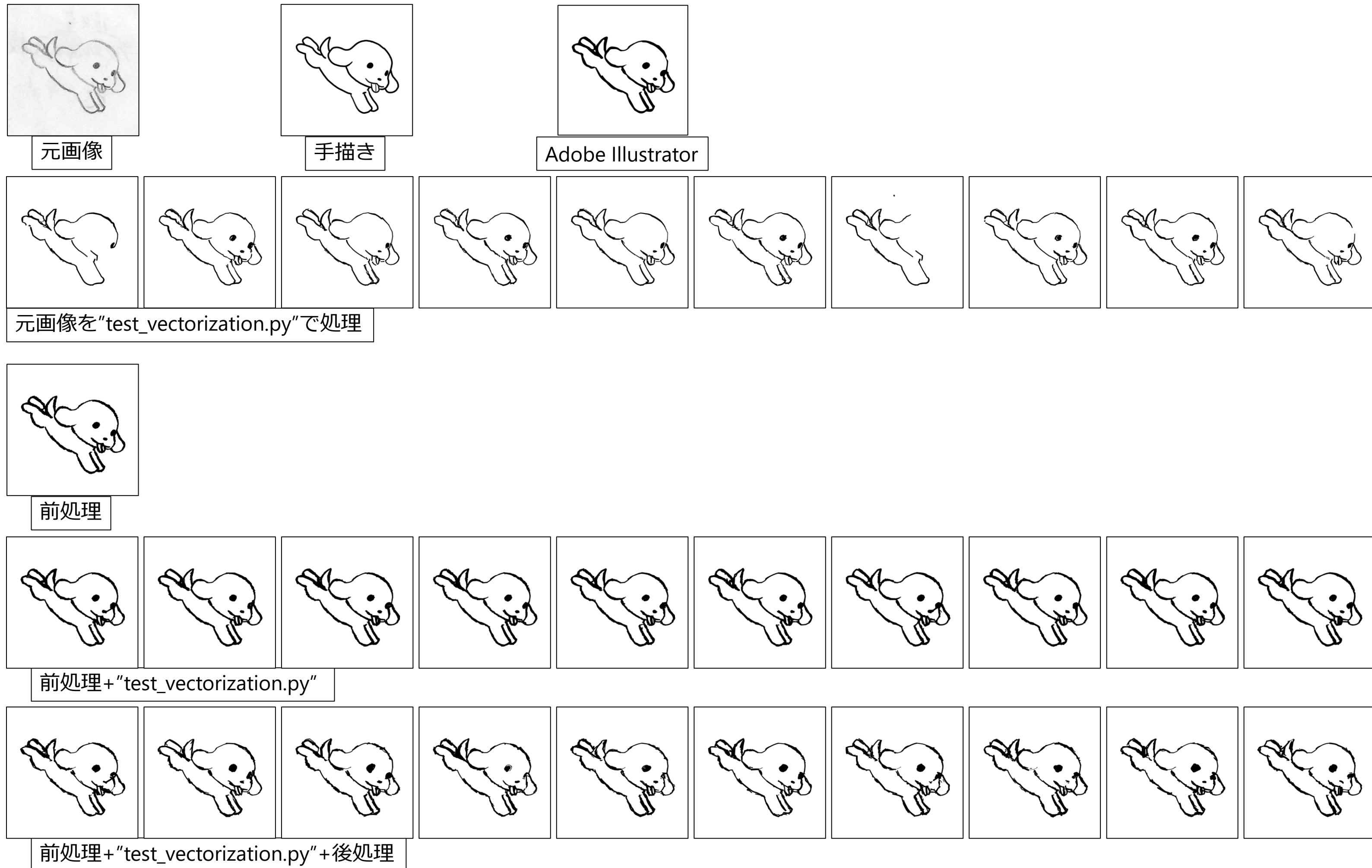
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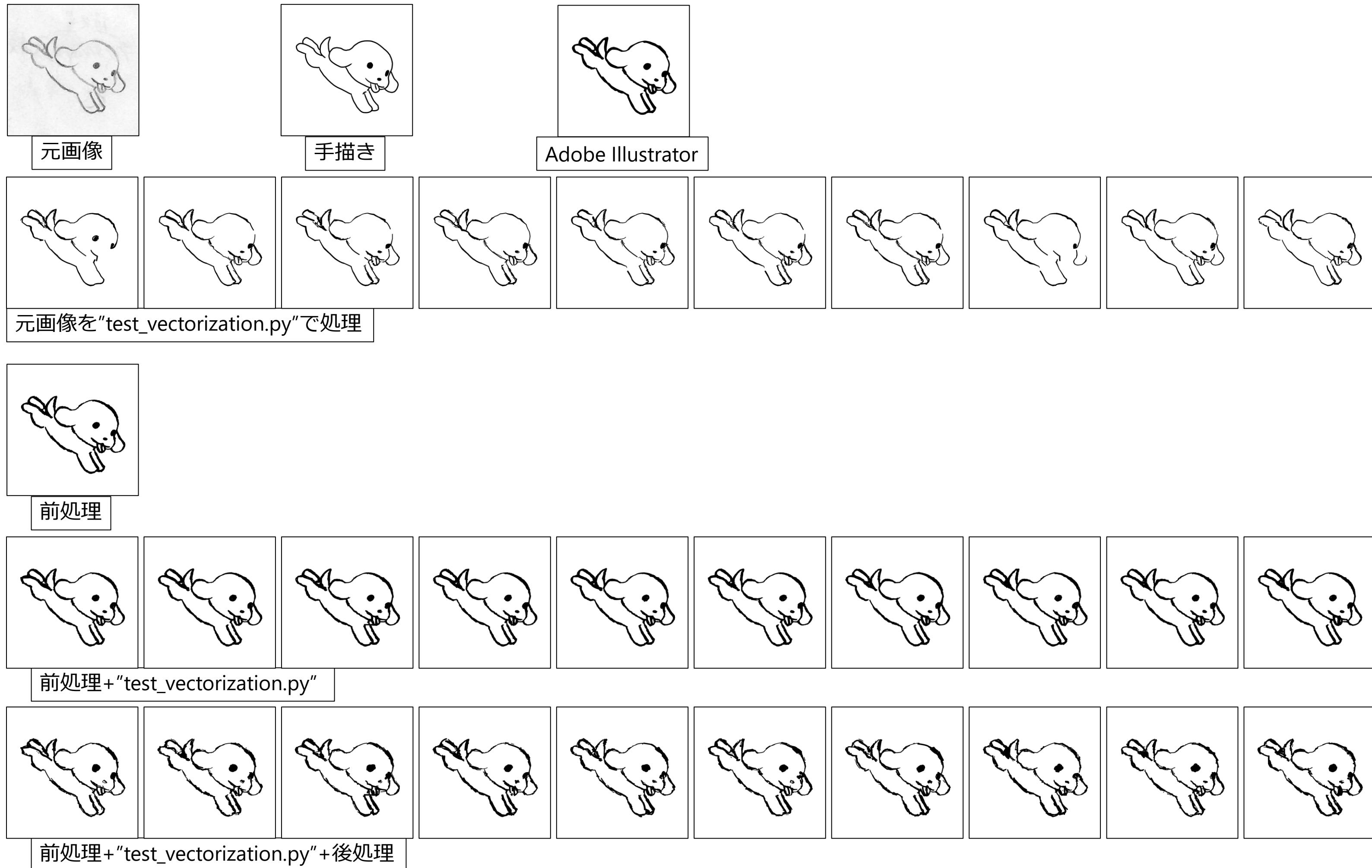
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dog720.png



dog1000.png



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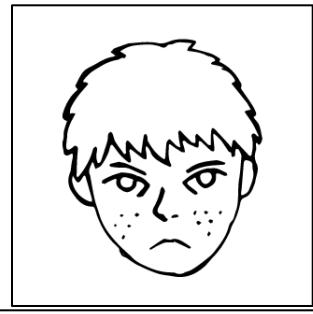
face320.png



元画像



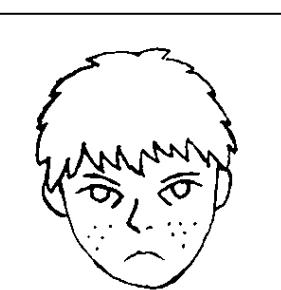
手描き



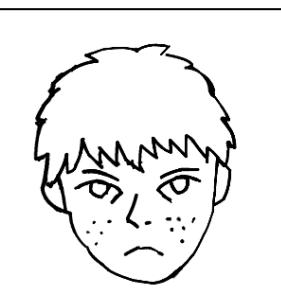
Adobe Illustrator



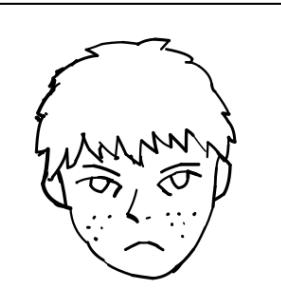
元画像を"test\_vectorization.py"で処理



前処理



前処理+"test\_vectorization.py"



前処理+"test\_vectorization.py"+後処理

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# face720.png



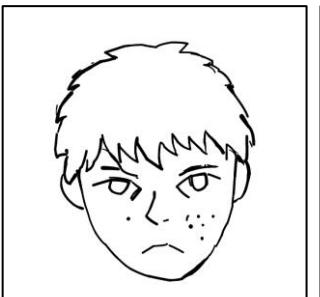
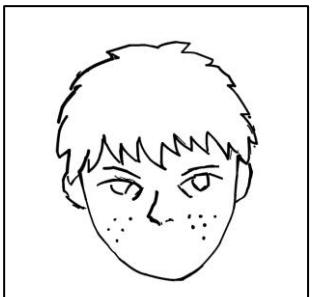
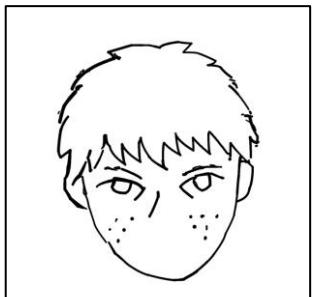
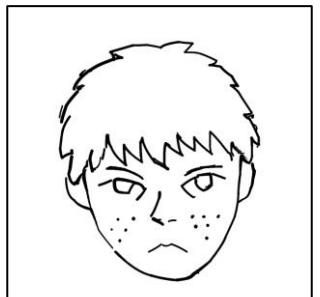
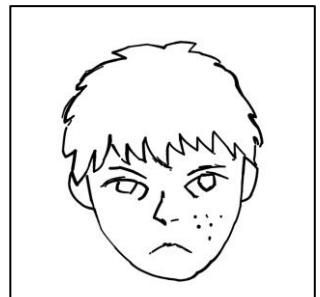
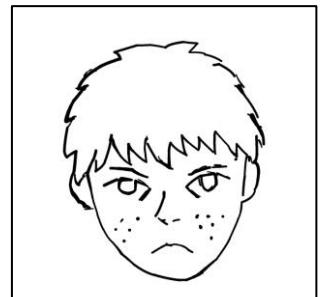
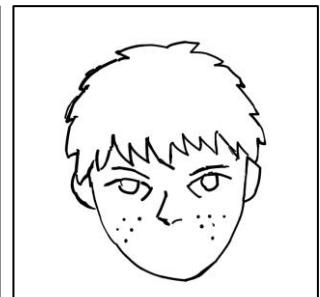
元画像



手描き



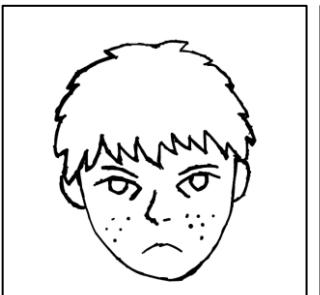
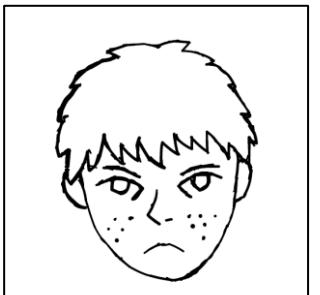
Adobe Illustrator



元画像を"test\_vectorization.py"で処理



前処理



前処理+"test\_vectorization.py"



前処理+"test\_vectorization.py"+後処理

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face1000.png



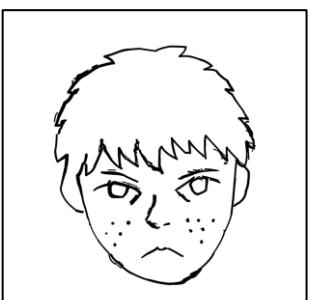
元画像



手描き



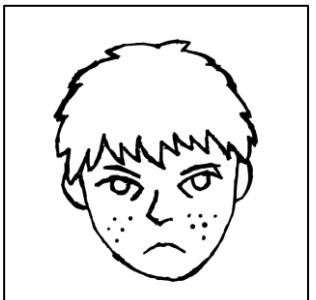
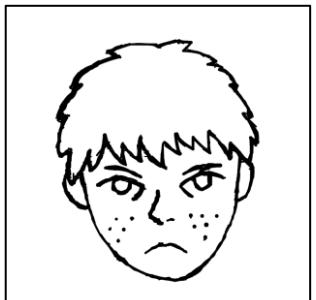
Adobe Illustrator



元画像を"test\_vectorization.py"で処理



前処理



前処理+"test\_vectorization.py"



前処理+"test\_vectorization.py"+後処理

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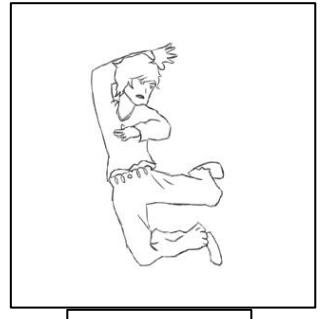
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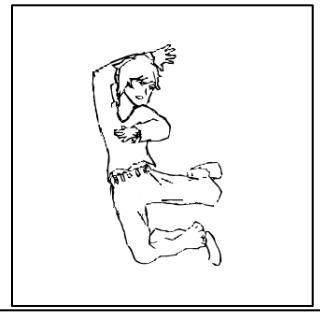
# jump320.png



元画像



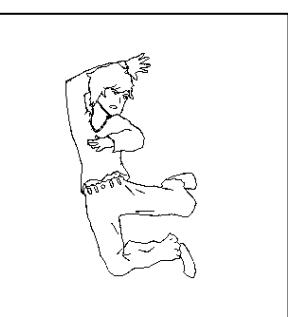
手描き



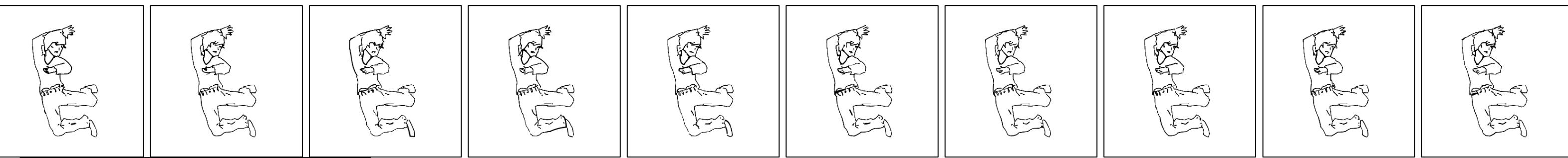
Adobe Illustrator



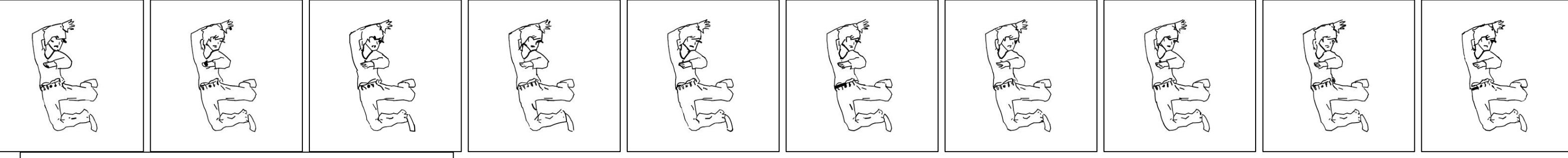
元画像を"test\_vectorization.py"で処理



前処理



前処理+"test\_vectorization.py"



前処理+"test\_vectorization.py"+後処理

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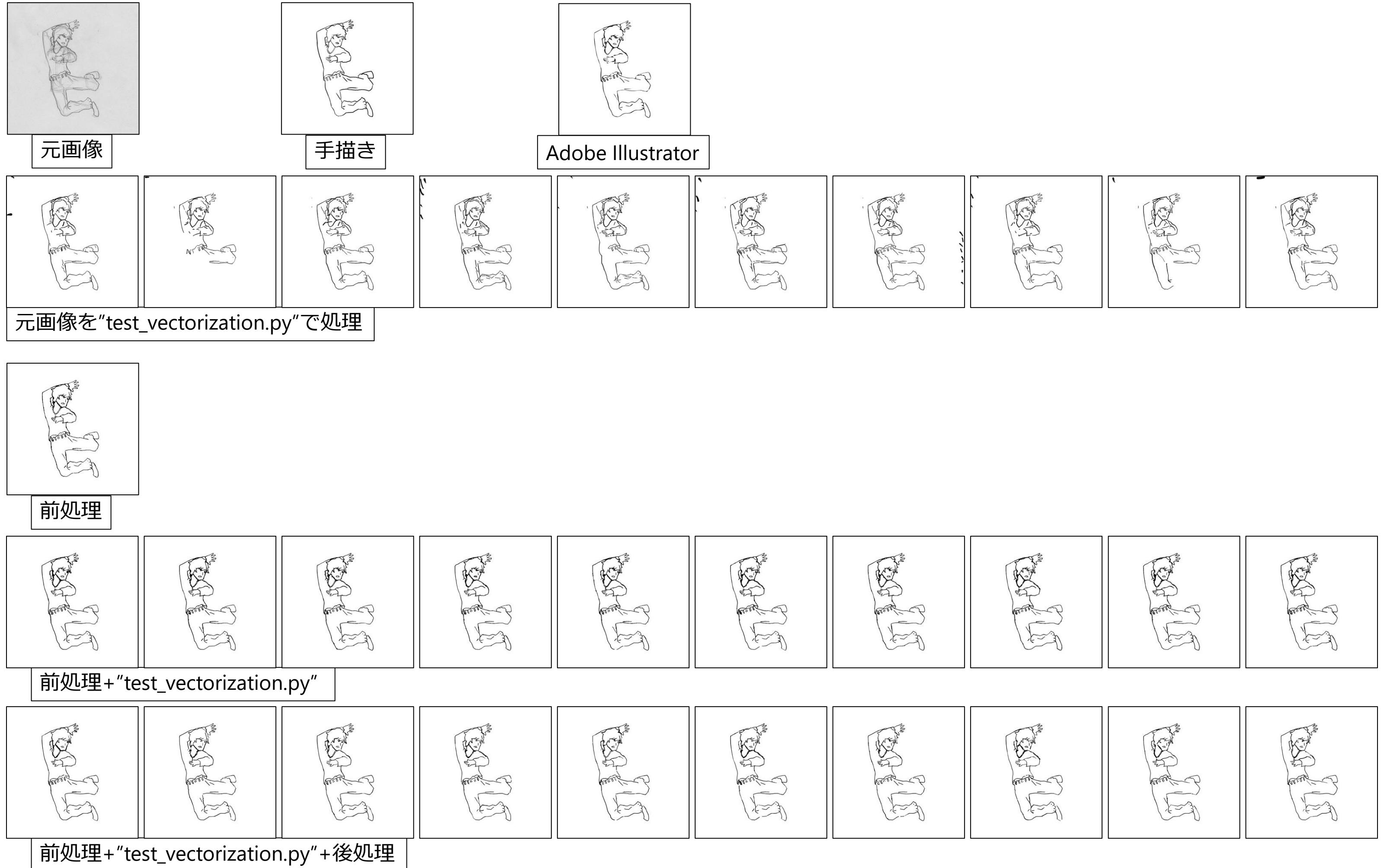
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# jump720.png



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jump1000.png



元画像



手描き



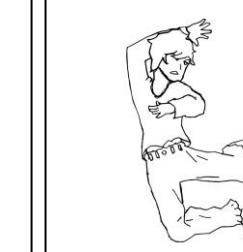
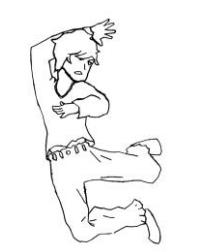
Adobe Illustrator



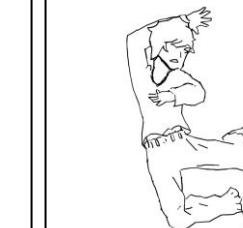
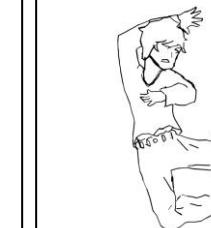
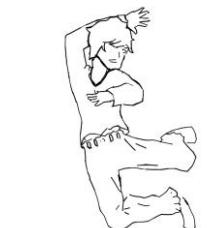
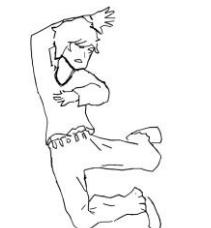
元画像を"test\_vectorization.py"で処理



前処理



前処理+"test\_vectorization.py"



前処理+"test\_vectorization.py"+後処理

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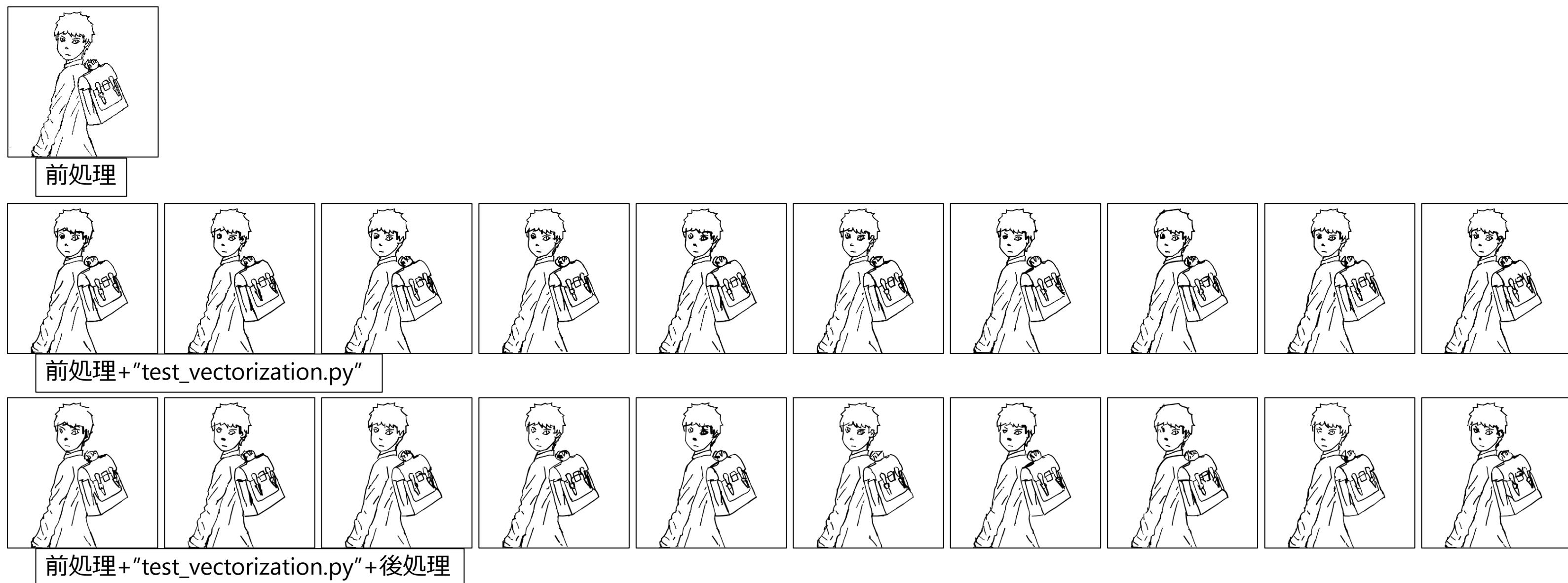
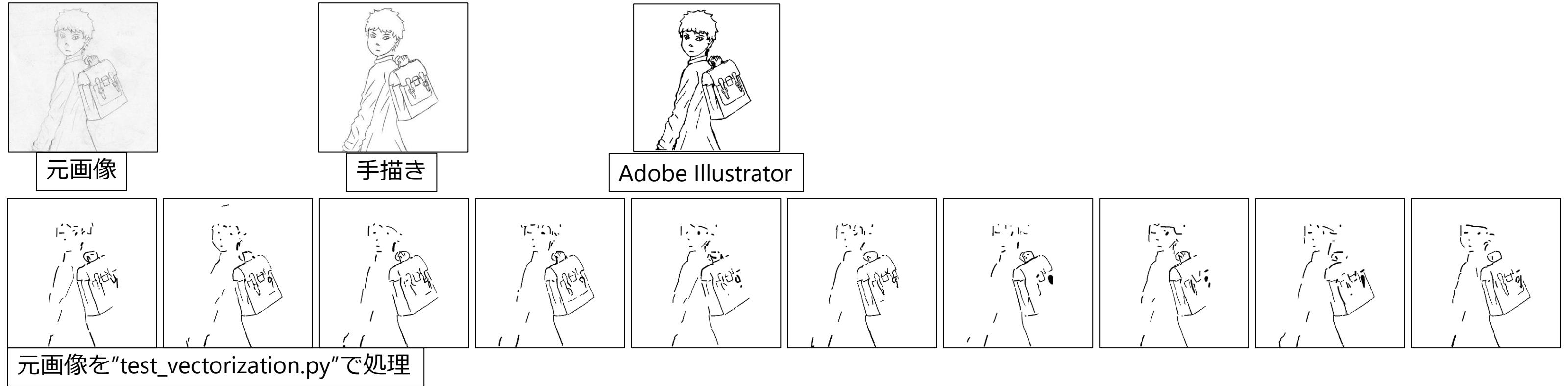
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# man320.png



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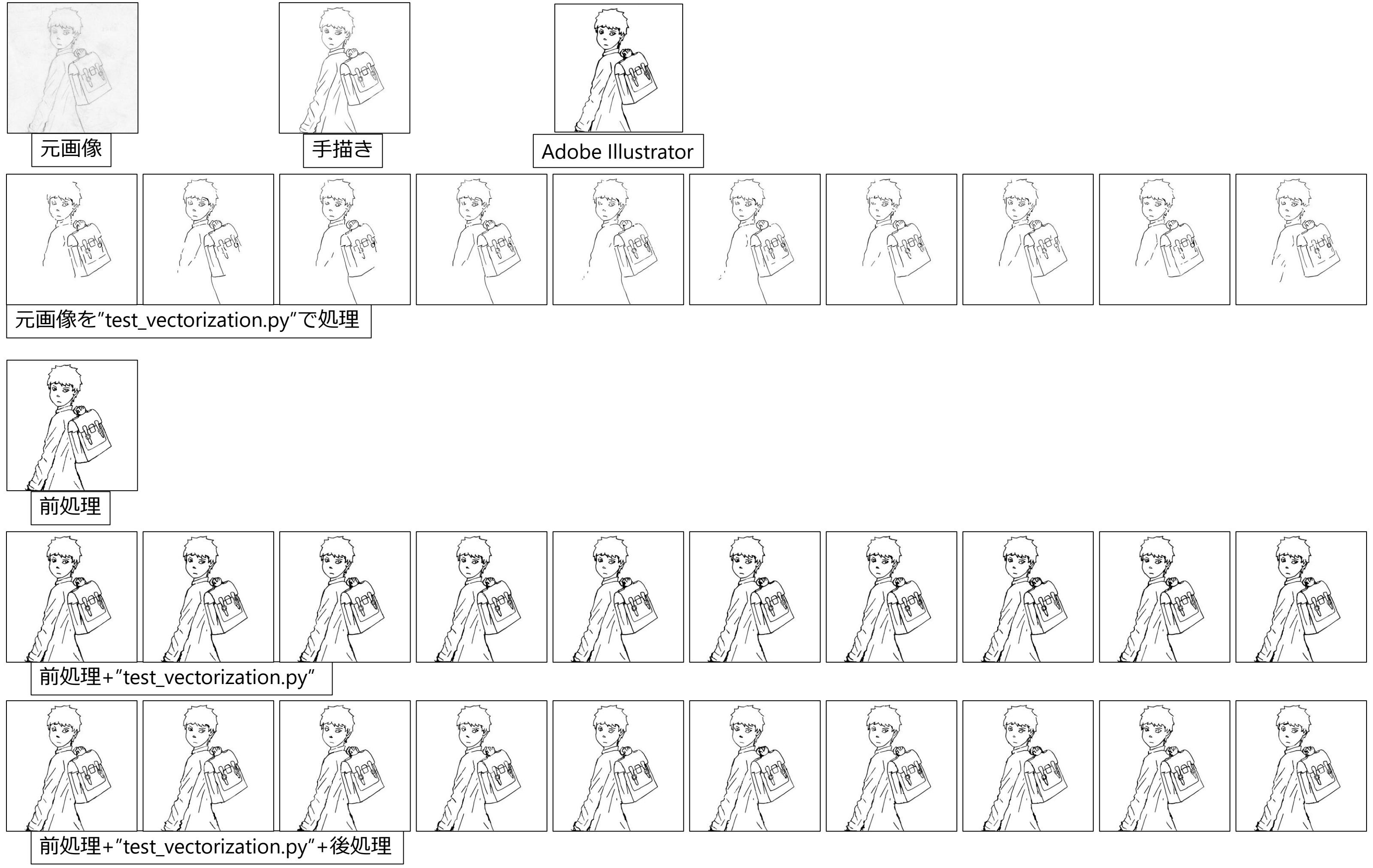
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# man720.png



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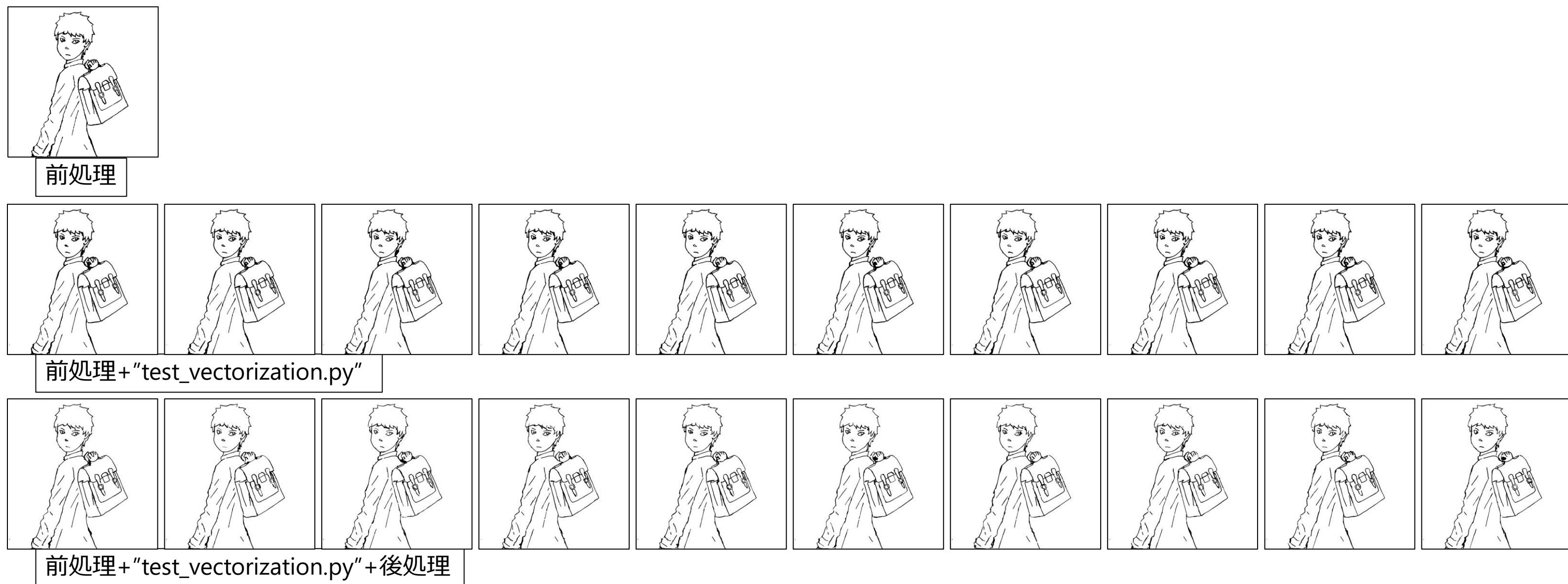
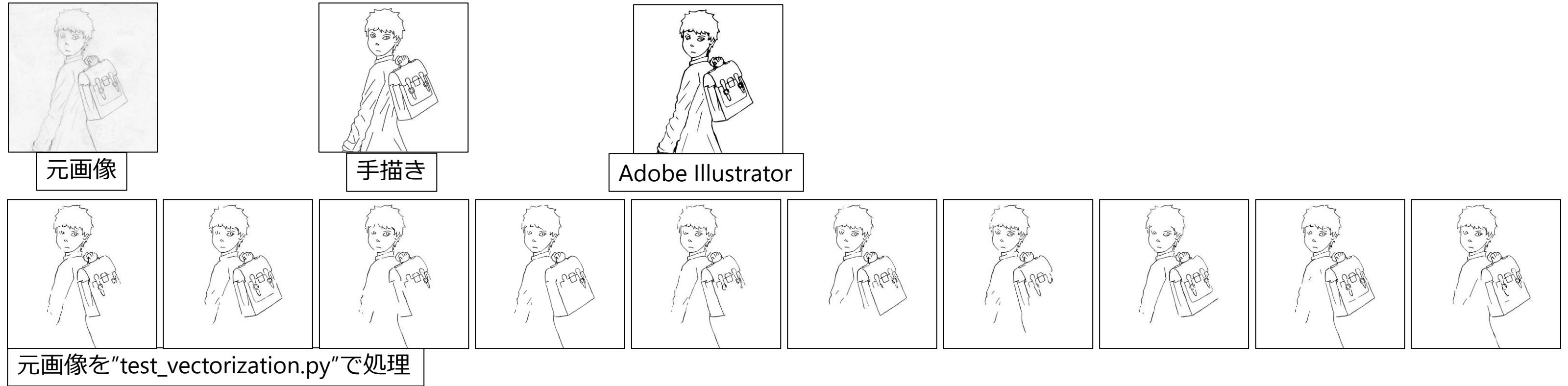
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# man1000.png



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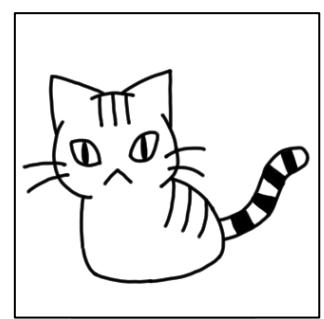
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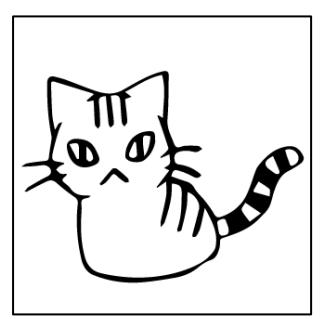
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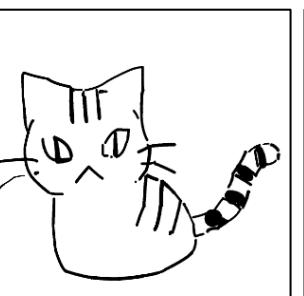
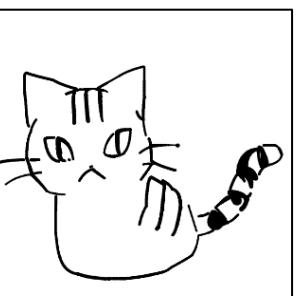
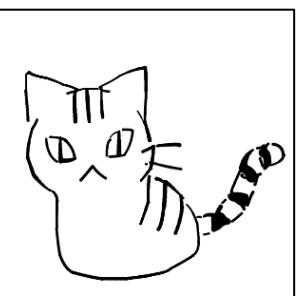
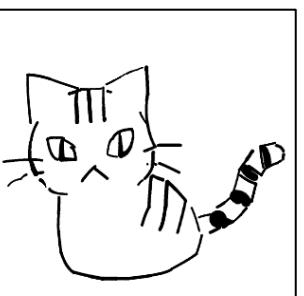
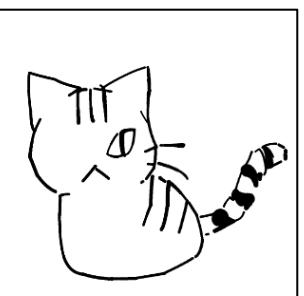
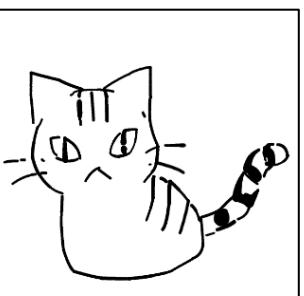
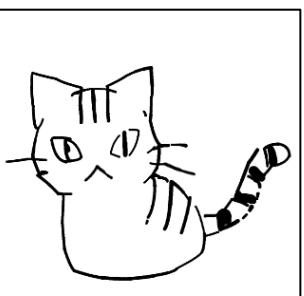
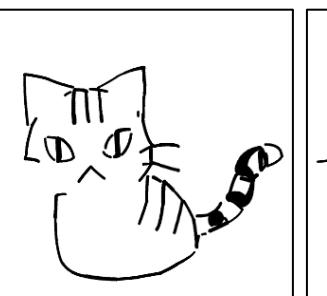
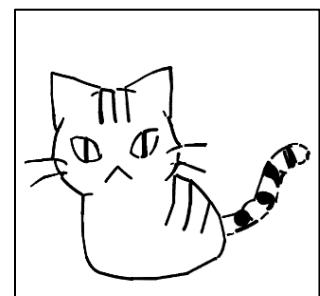
元画像



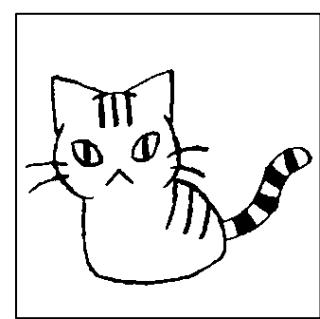
手描き



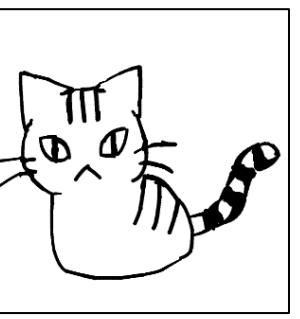
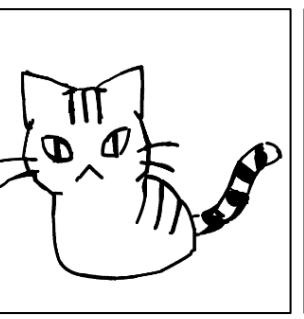
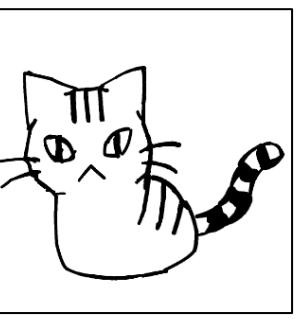
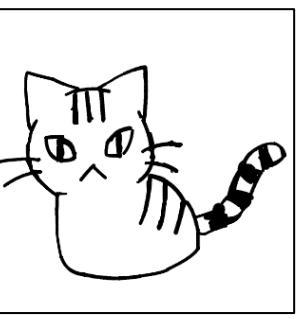
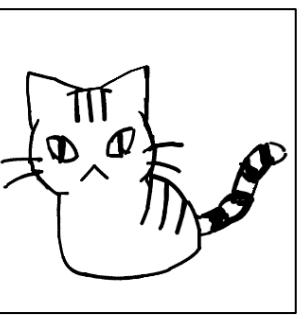
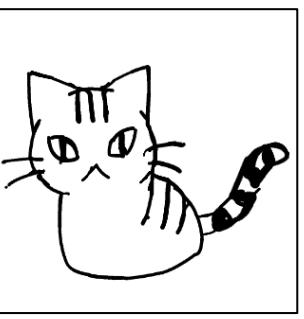
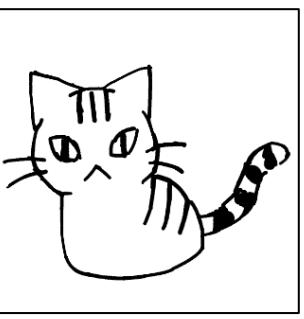
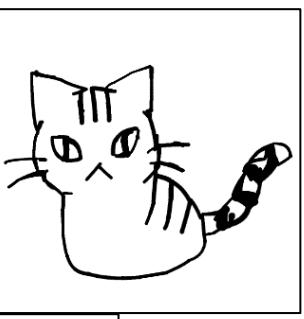
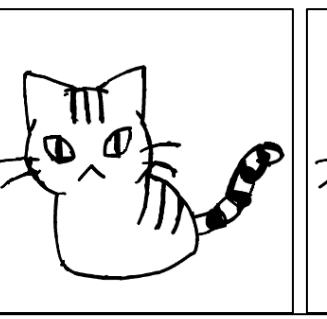
Adobe Illustrator



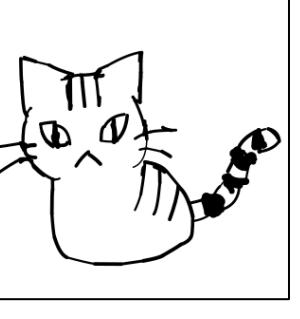
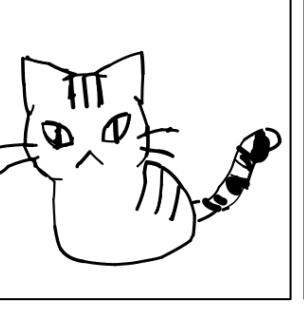
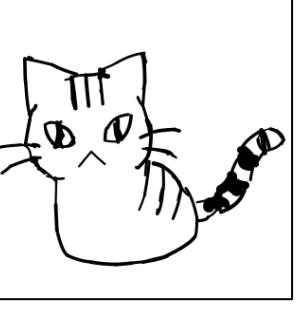
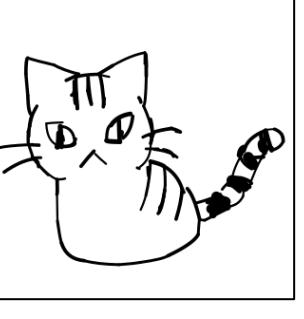
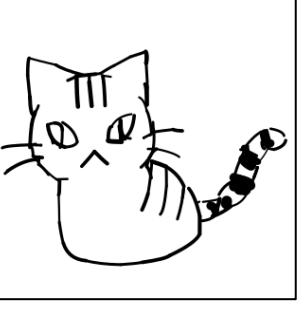
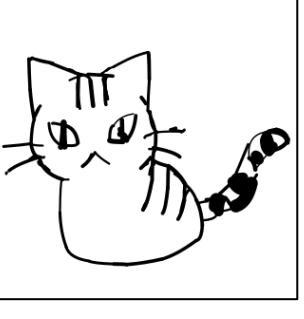
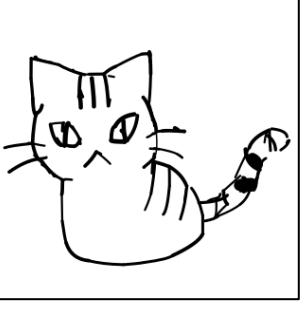
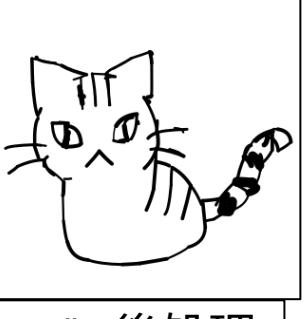
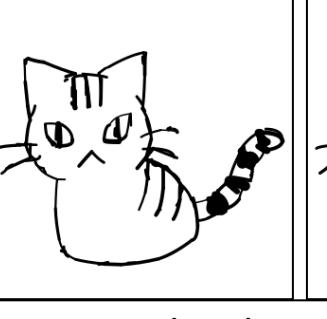
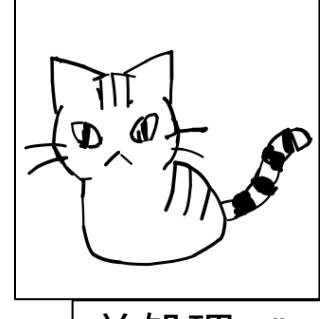
元画像を"test\_vectorization.py"で処理



前処理



前処理+"test\_vectorization.py"



前処理+"test\_vectorization.py"+後処理

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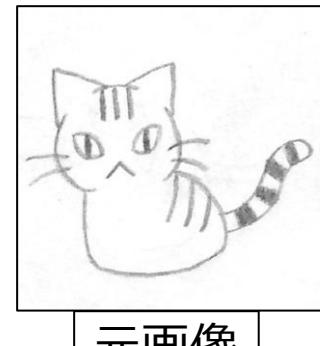
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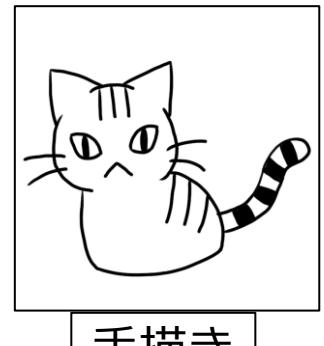
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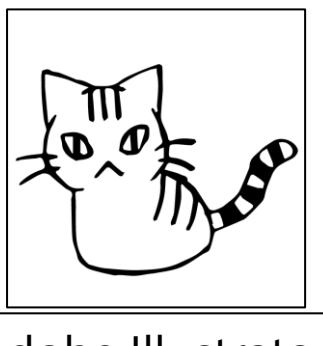
tabby720.png



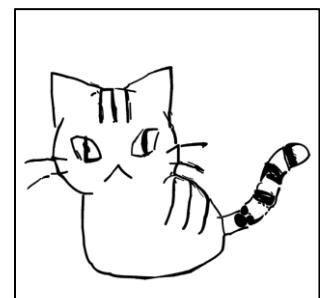
元画像



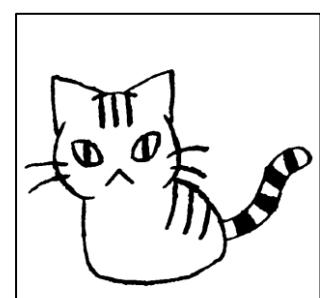
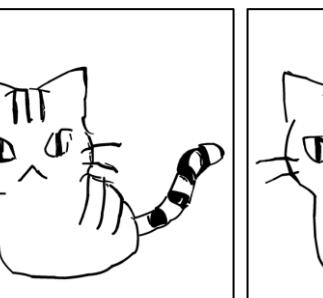
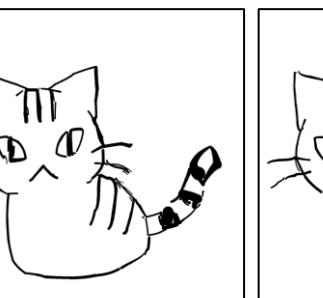
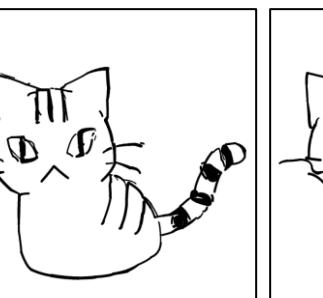
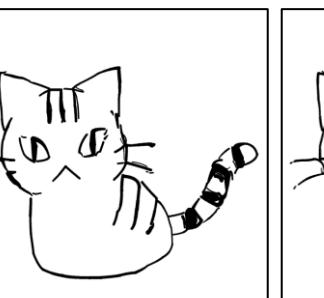
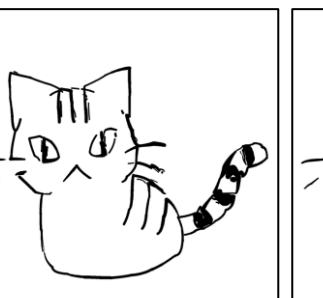
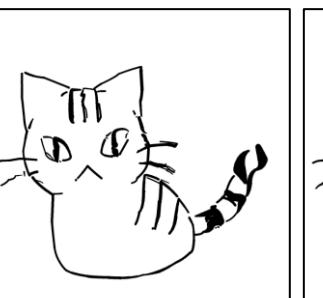
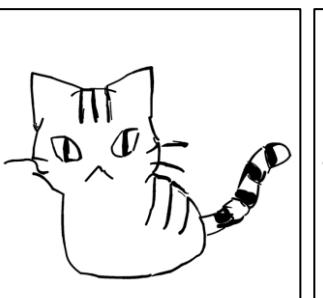
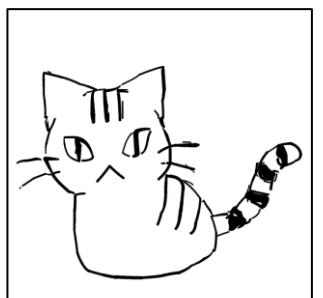
手描き



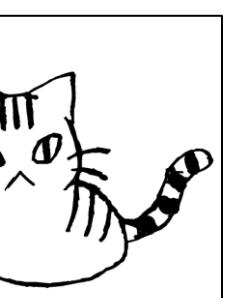
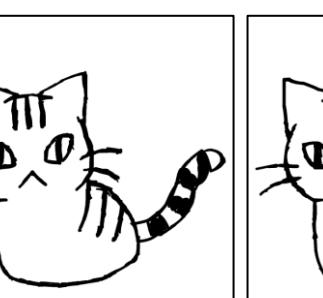
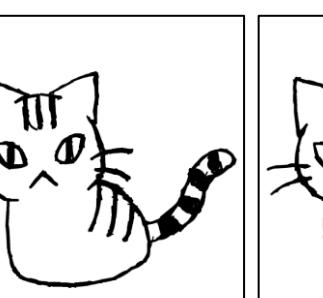
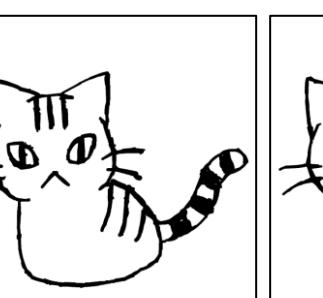
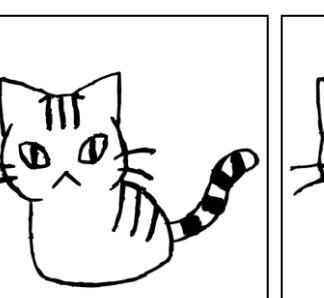
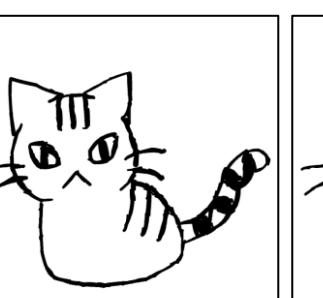
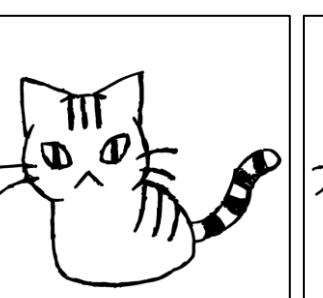
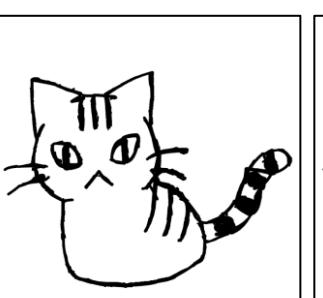
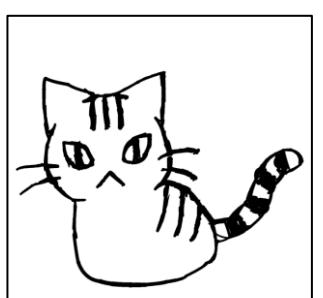
Adobe Illustrator



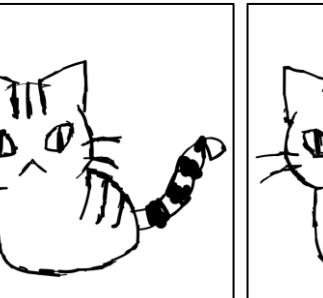
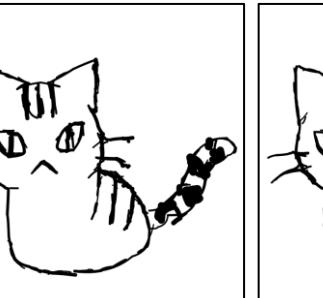
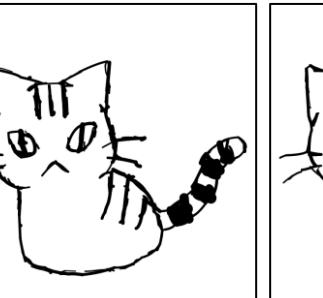
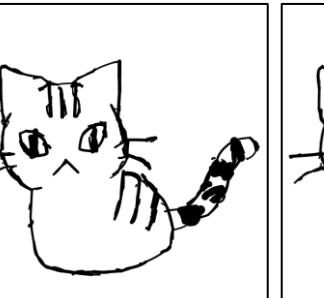
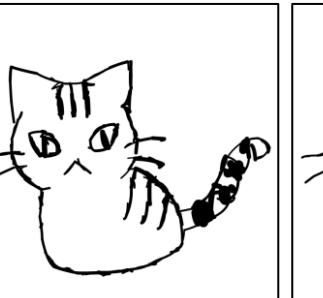
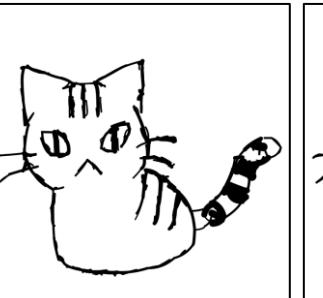
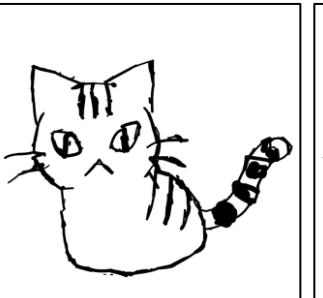
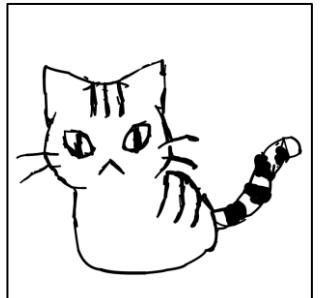
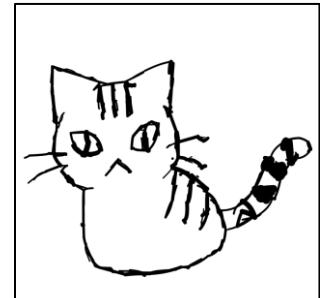
元画像を"test\_vectorization.py"で処理



前処理



前処理+"test\_vectorization.py"



前処理+"test\_vectorization.py"+後処理

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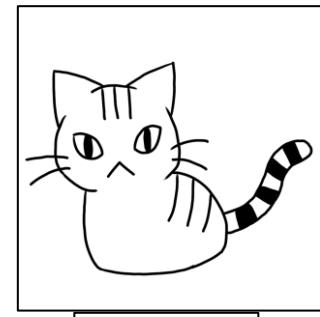
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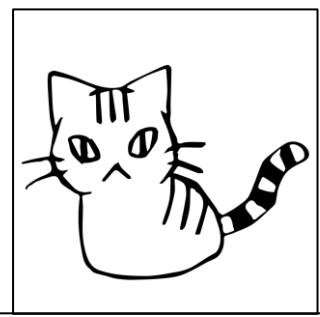
tabby1000.png



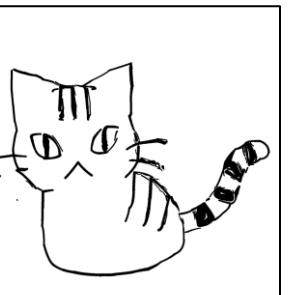
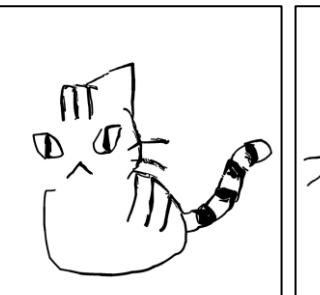
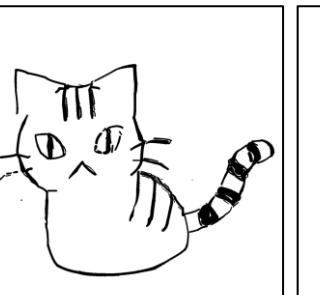
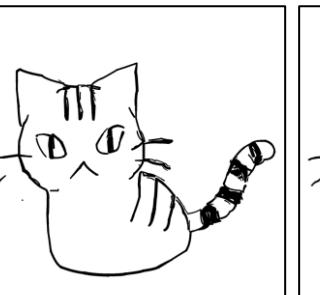
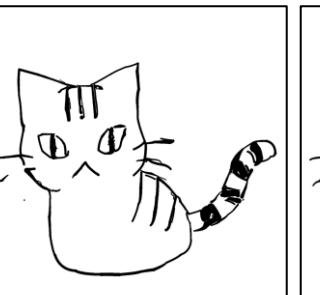
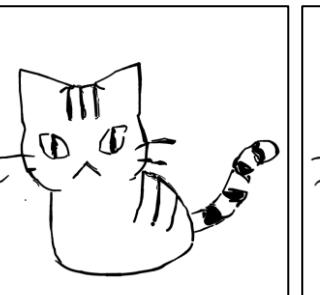
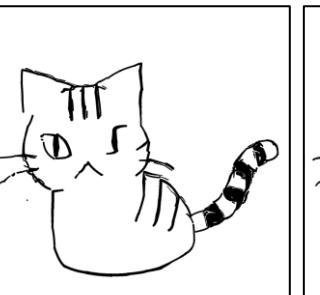
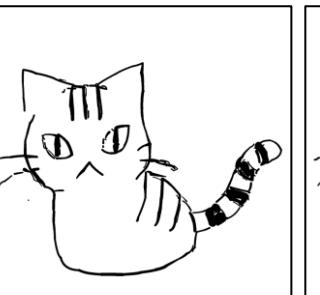
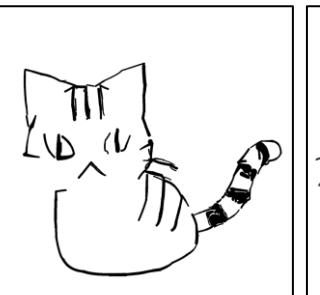
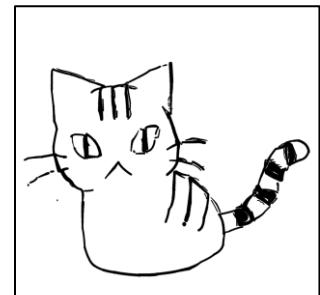
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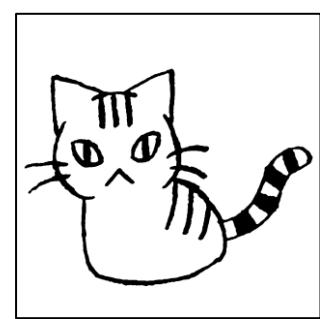
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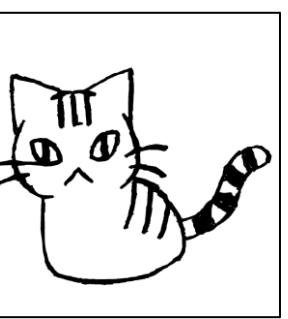
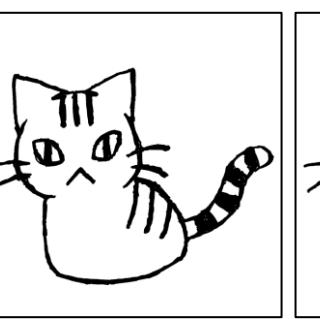
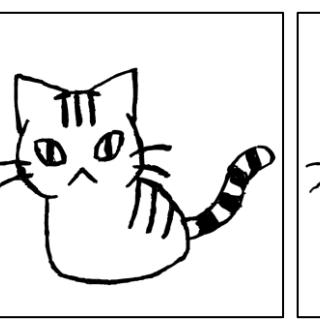
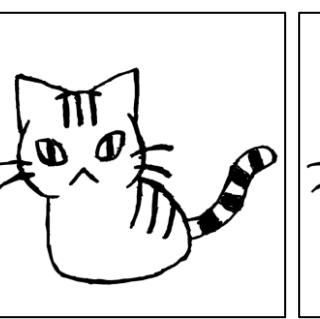
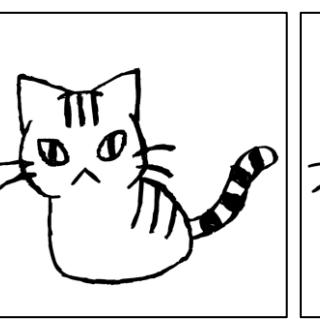
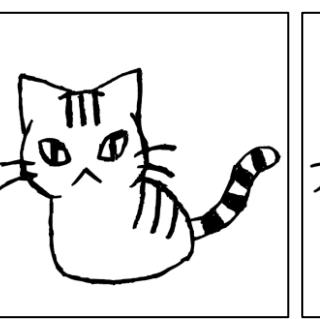
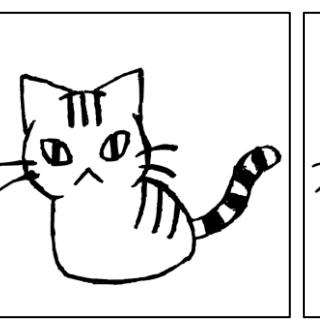
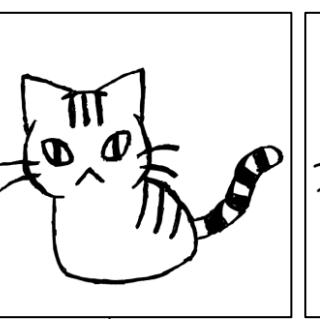
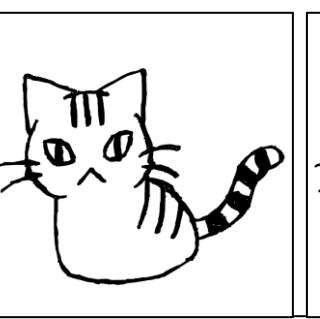
Adobe Illustrator



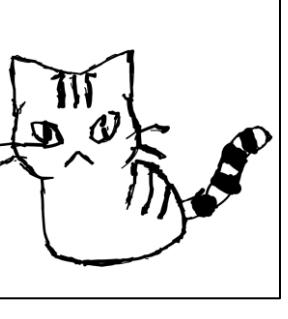
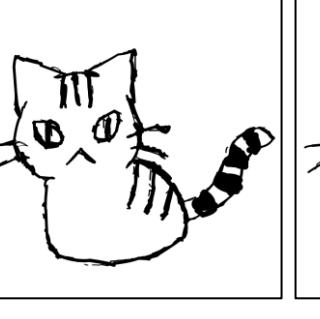
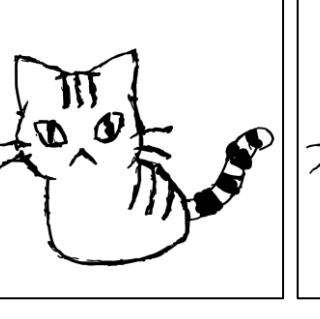
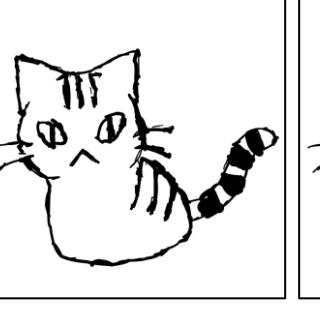
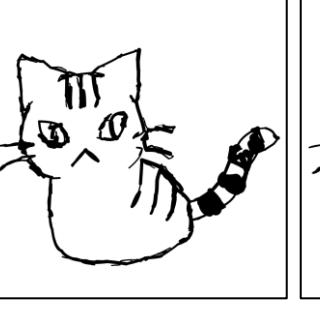
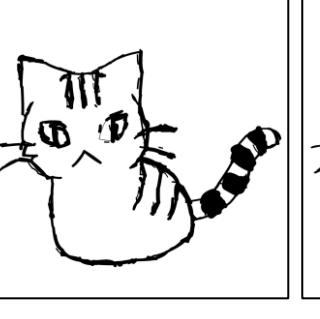
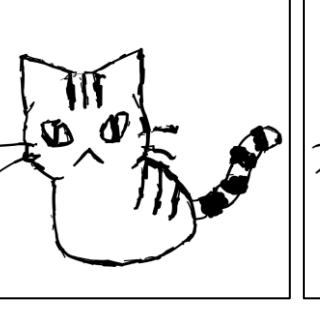
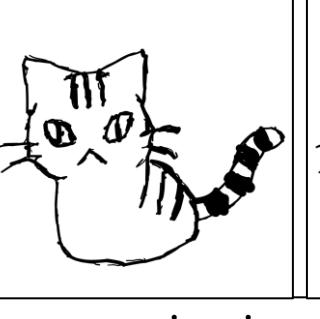
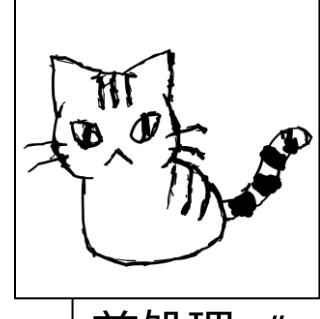
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前処理



前処理+"test\_vectorization.py"



前処理+"test\_vectorization.py"+後処理

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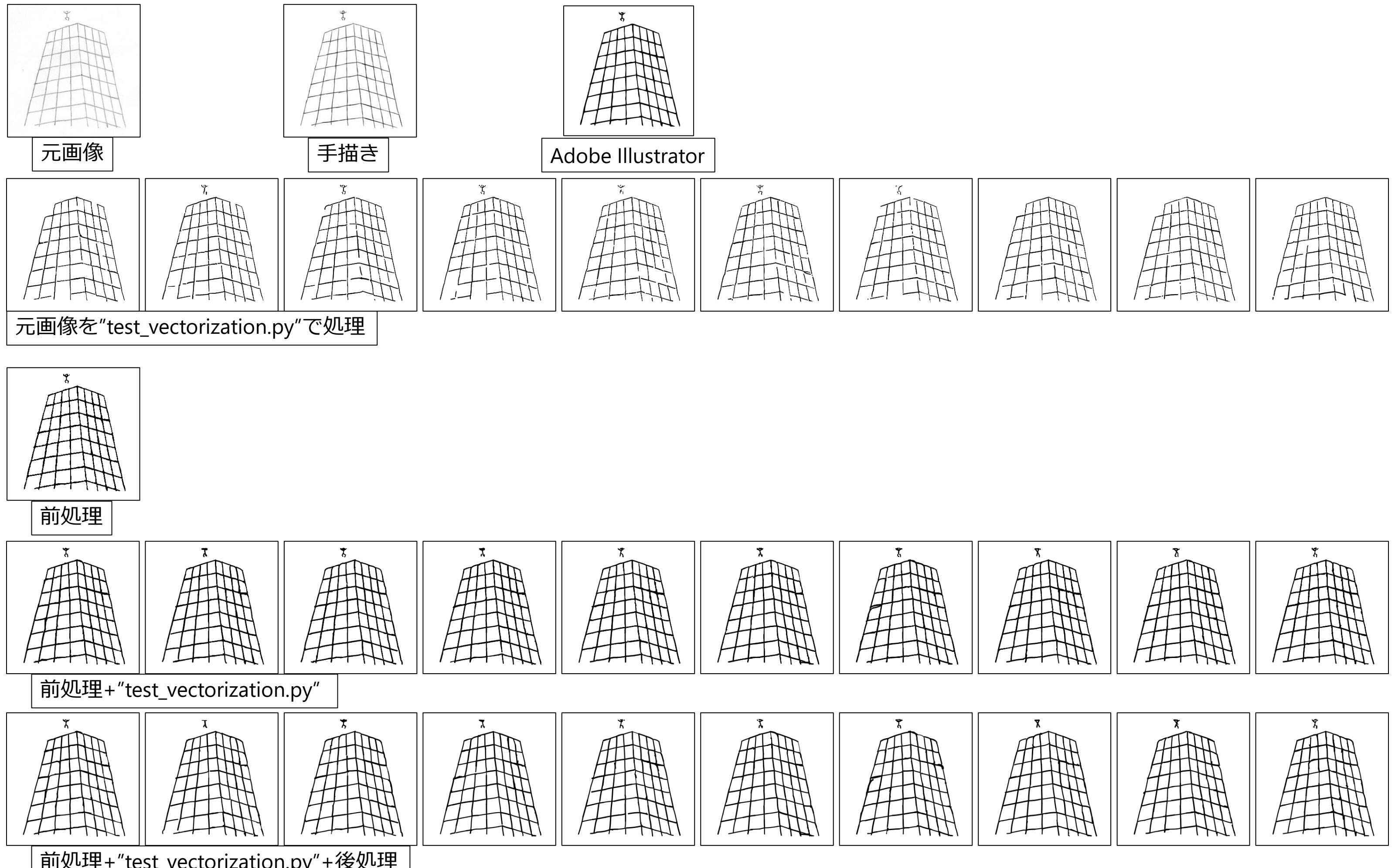
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# tower320.png



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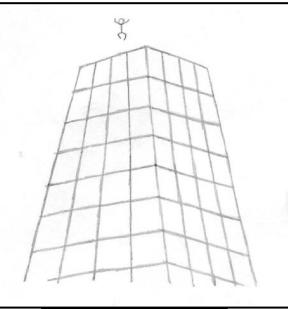
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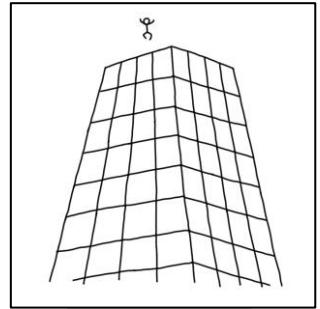
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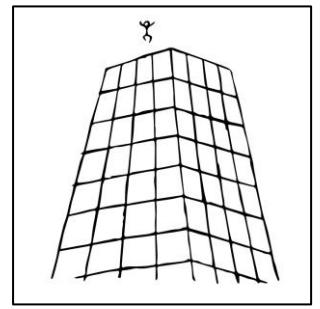
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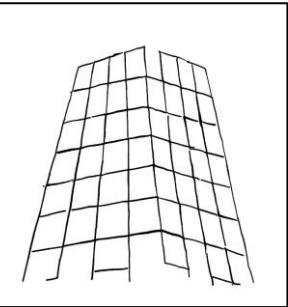
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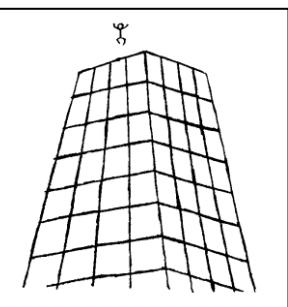
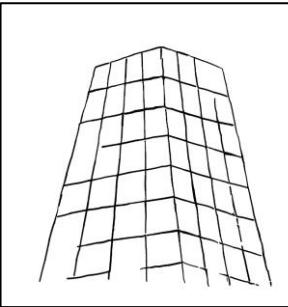
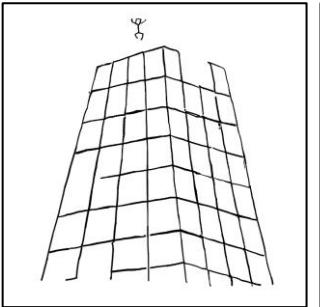
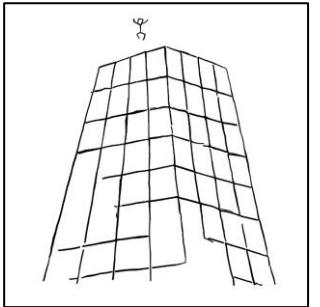
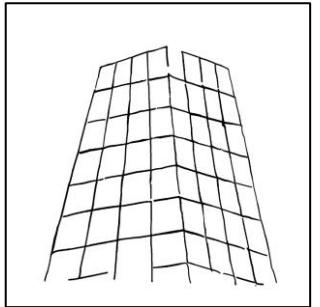
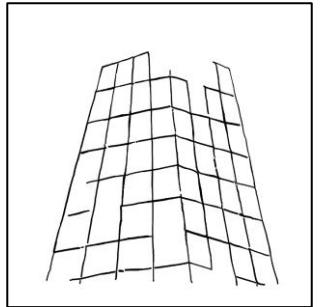
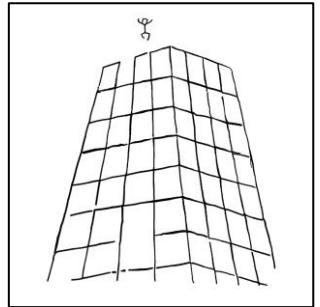
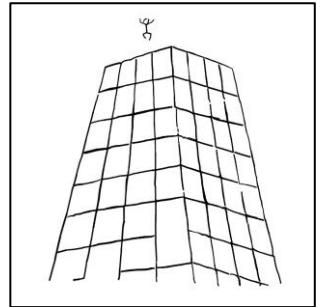
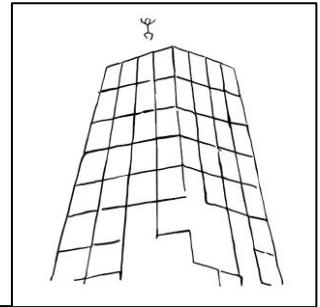
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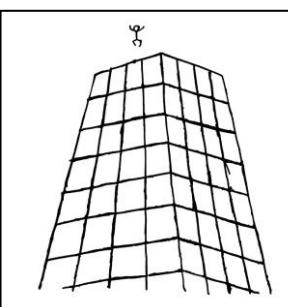
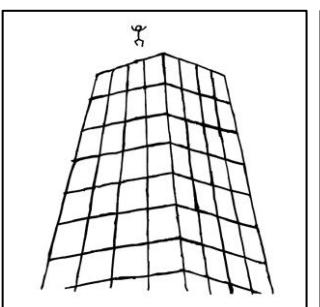
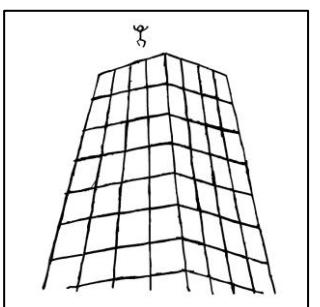
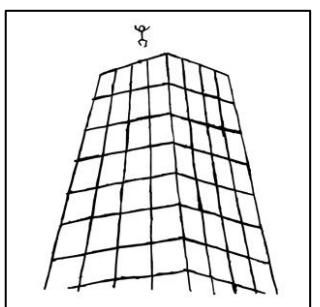
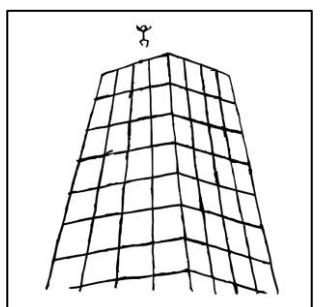
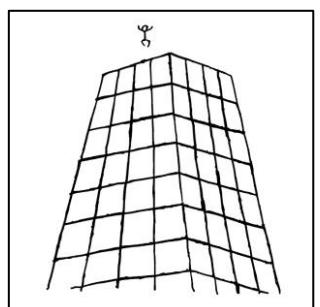
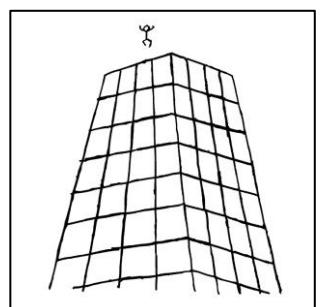
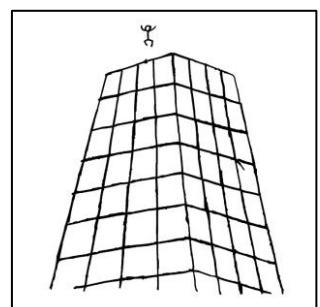
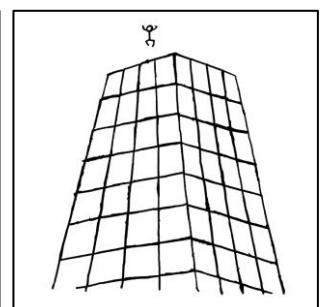
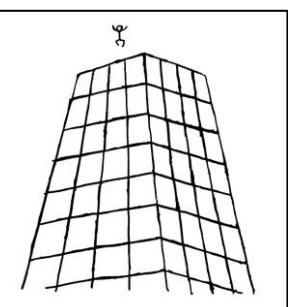
Adobe Illustrator



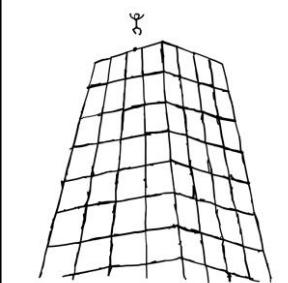
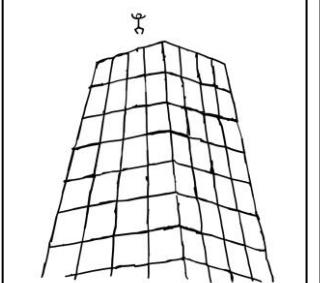
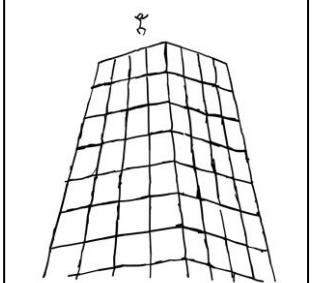
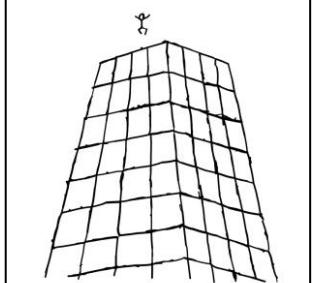
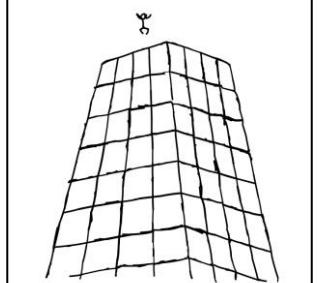
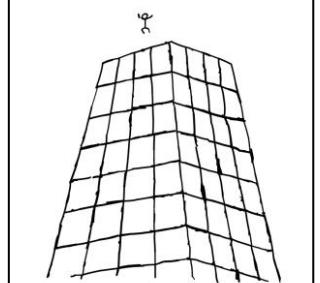
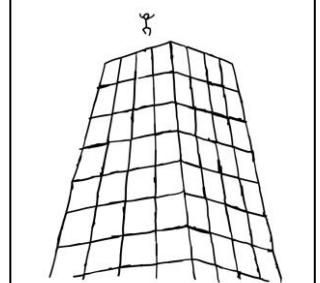
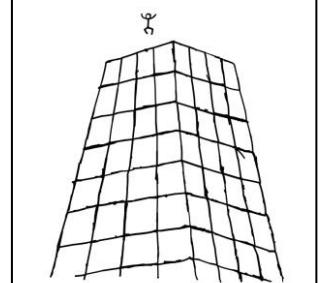
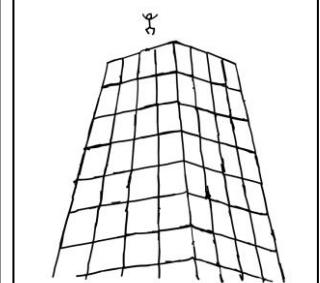
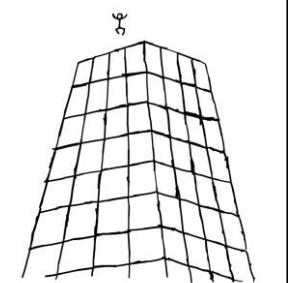
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前処理



前処理+"test\_vectorization.py"



前処理+"test\_vectorization.py"+後処理

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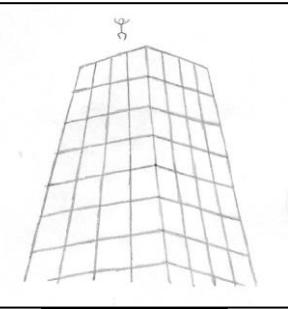
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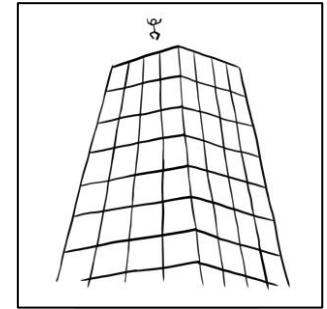
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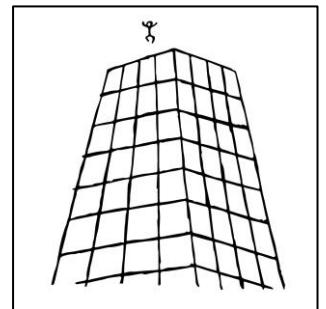
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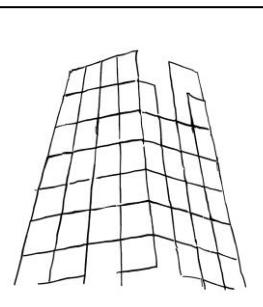
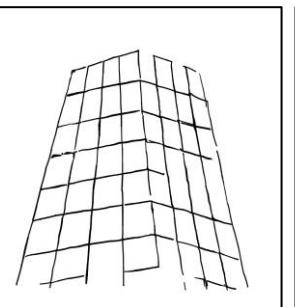
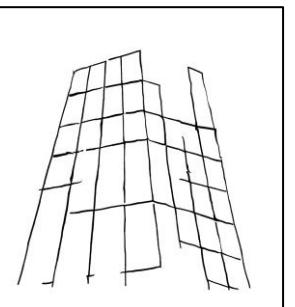
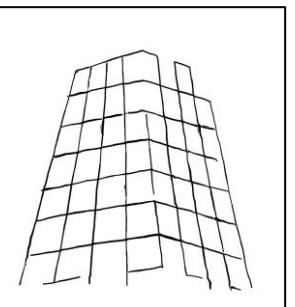
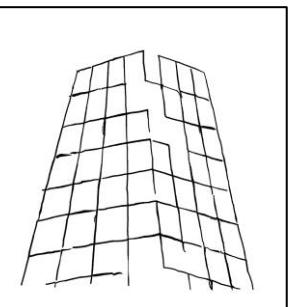
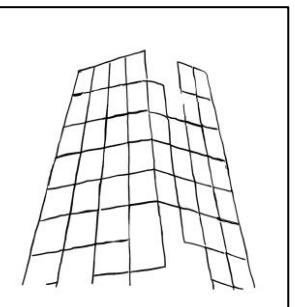
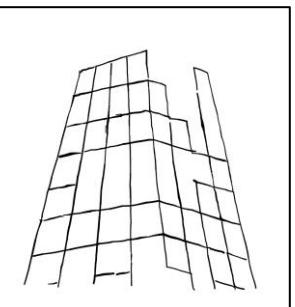
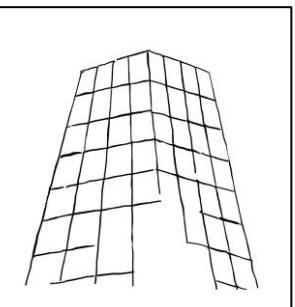
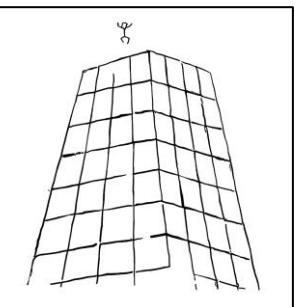
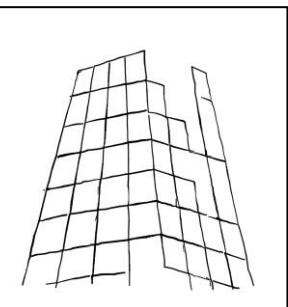
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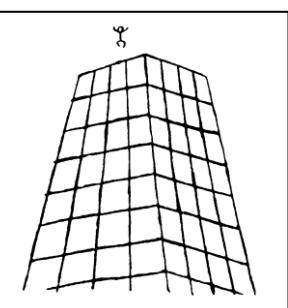
手描き



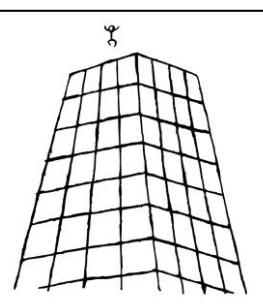
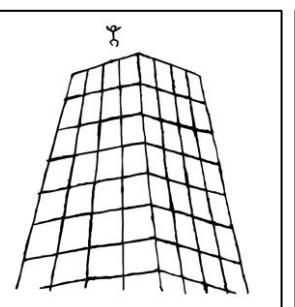
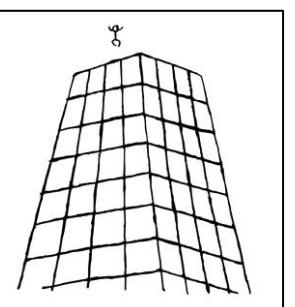
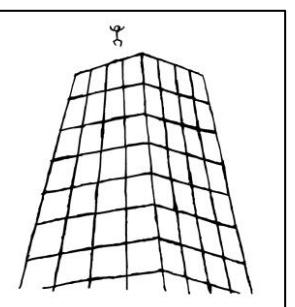
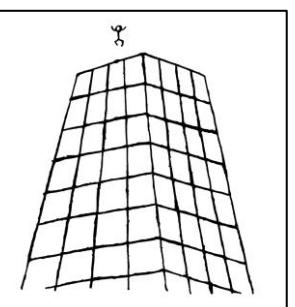
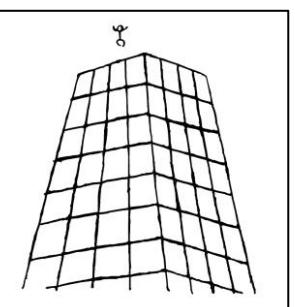
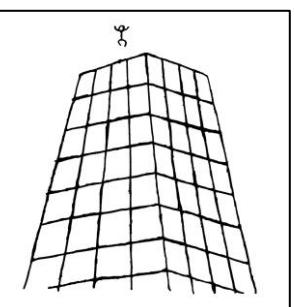
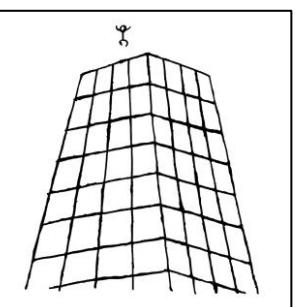
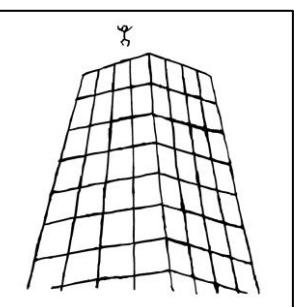
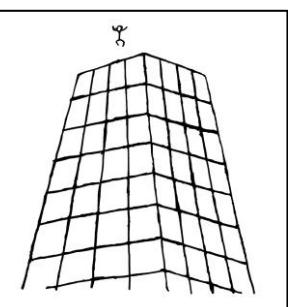
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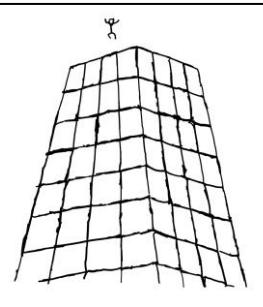
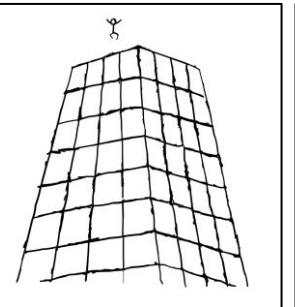
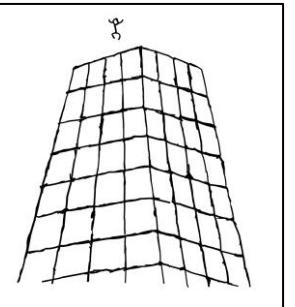
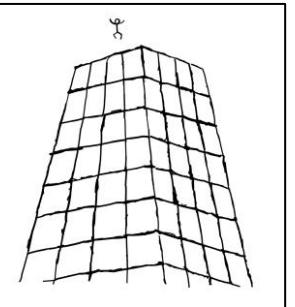
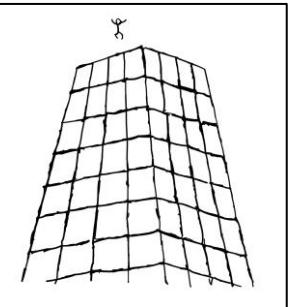
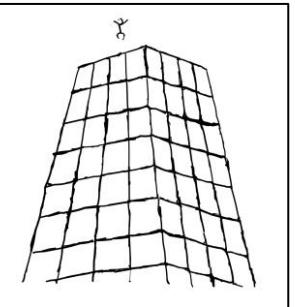
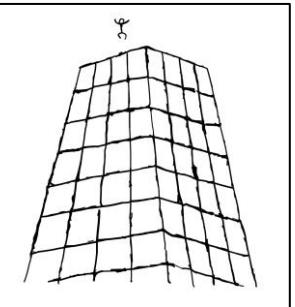
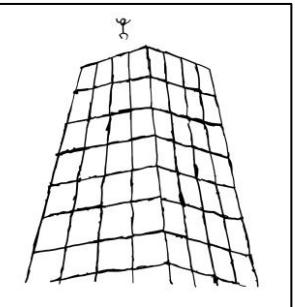
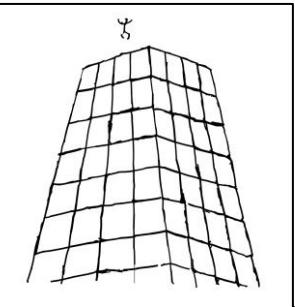
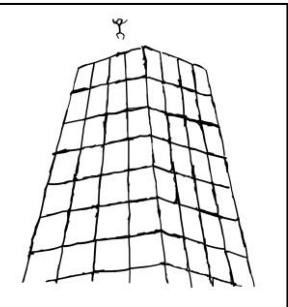
元画像を"test\_vectorization.py"で処理



前処理



前処理+ "test\_vectorization.py"



前処理+ "test\_vectorization.py" + 後処理

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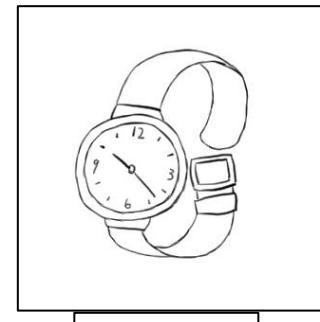
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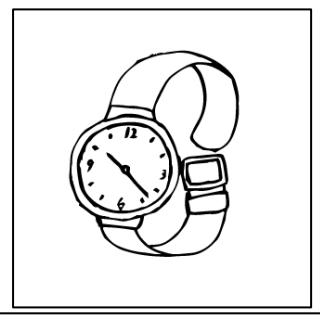
watch320.png



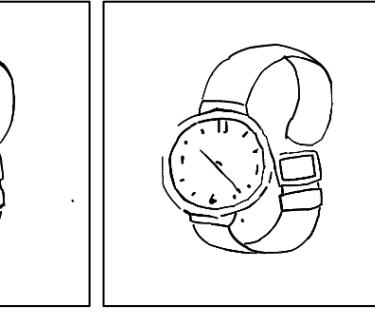
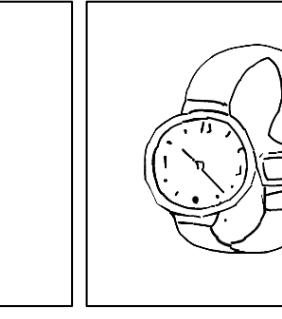
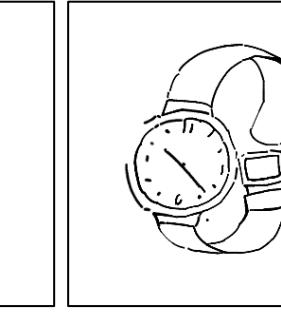
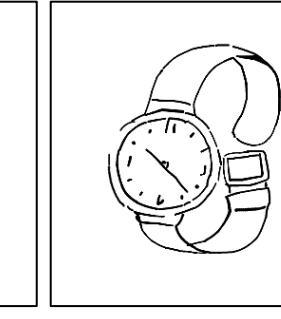
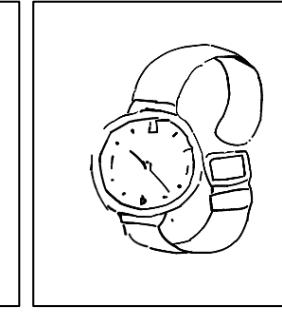
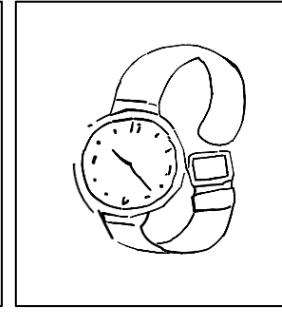
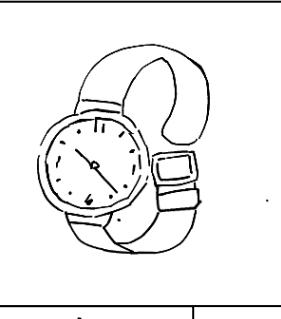
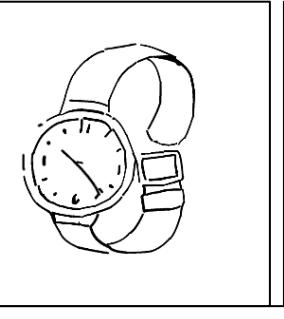
元画像



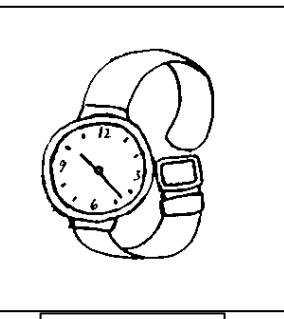
手描き



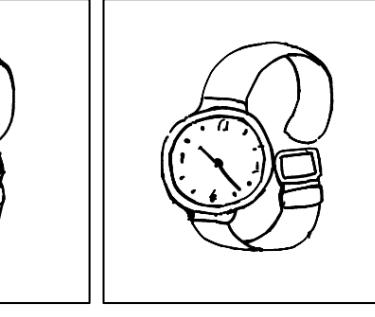
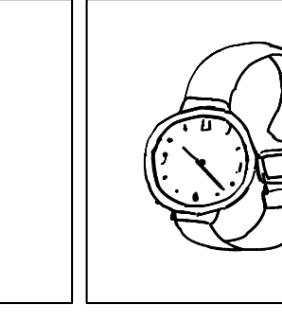
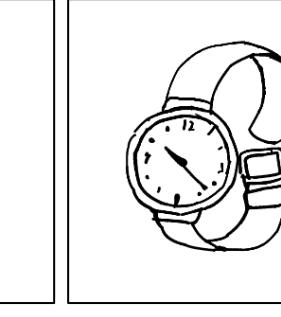
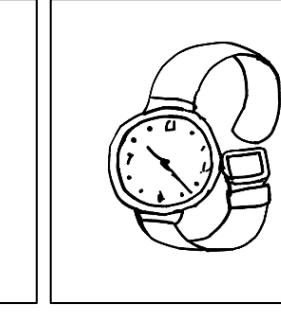
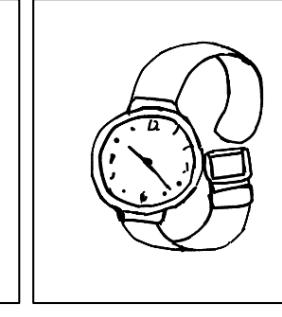
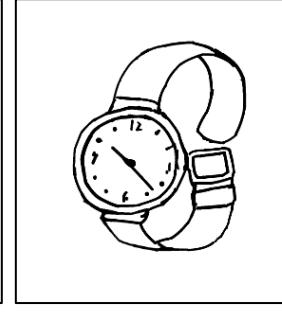
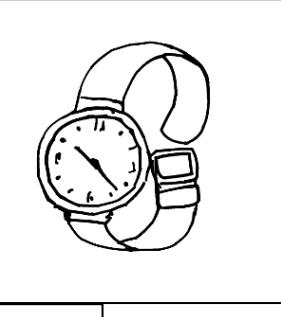
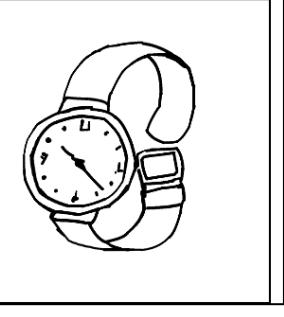
Adobe Illustrator



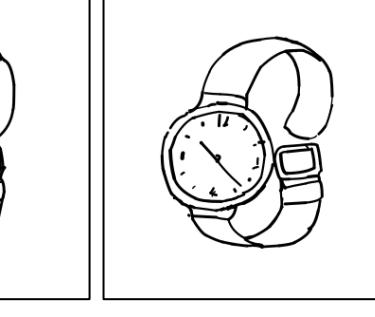
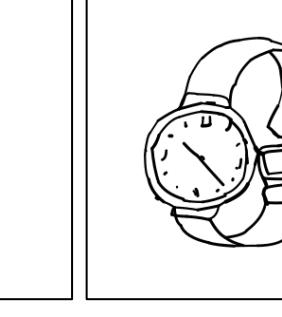
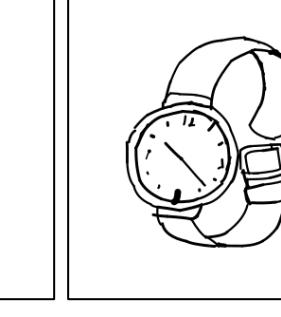
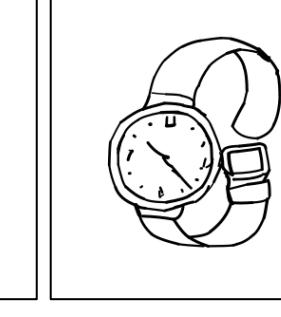
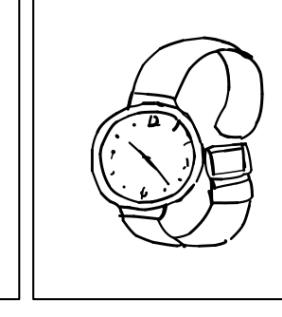
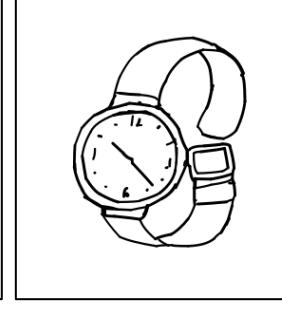
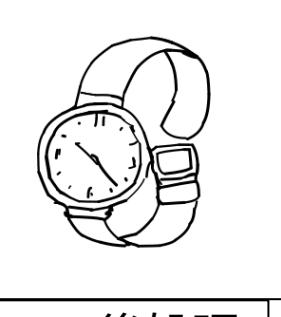
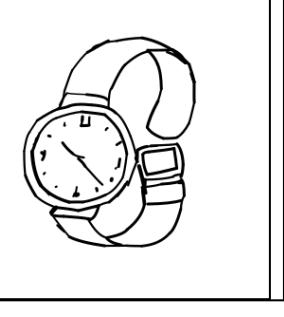
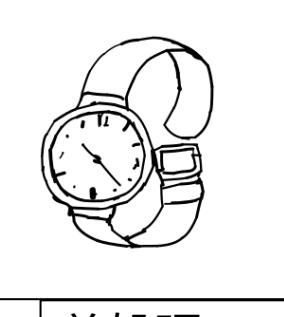
元画像を"test\_vectorization.py"で処理



前処理



前処理+"test\_vectorization.py"



前処理+"test\_vectorization.py"+後処理

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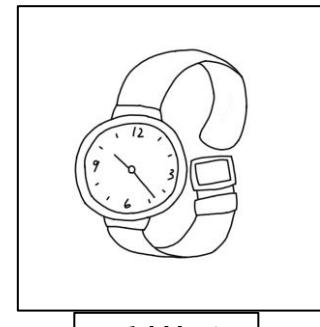
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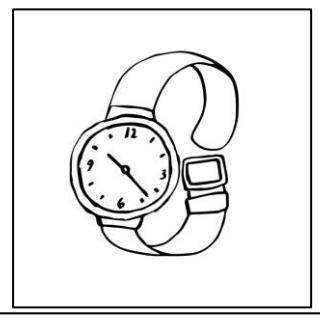
# watch720.png



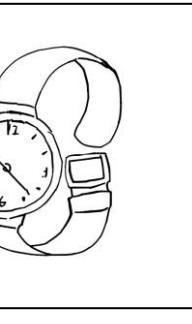
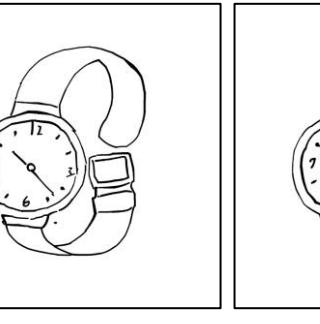
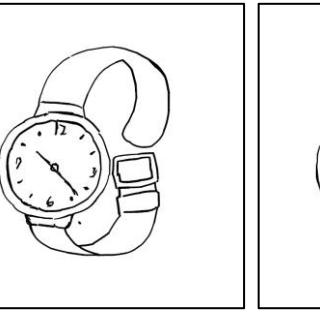
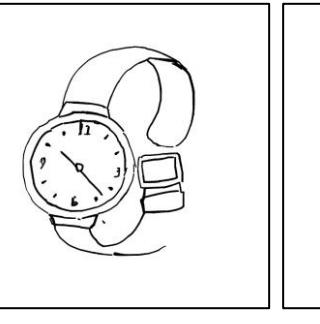
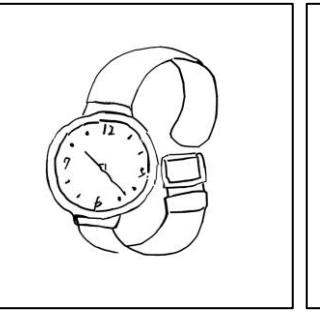
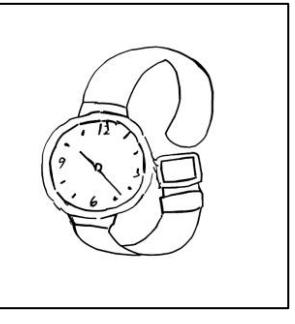
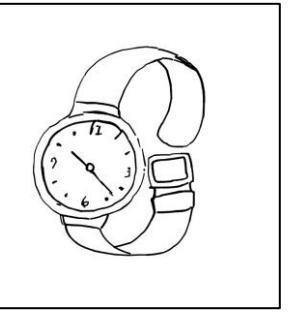
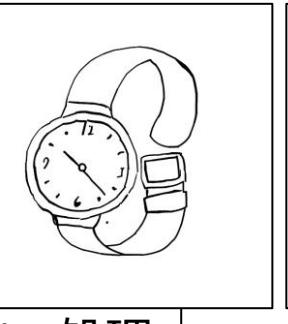
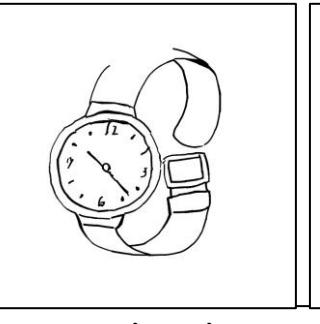
元画像



手描き



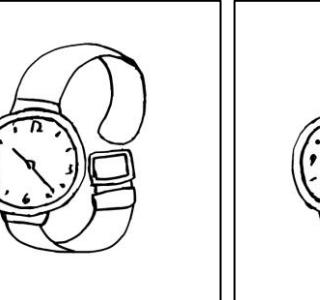
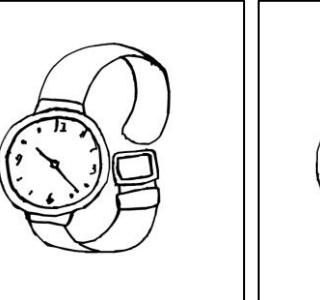
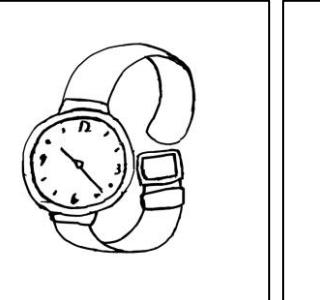
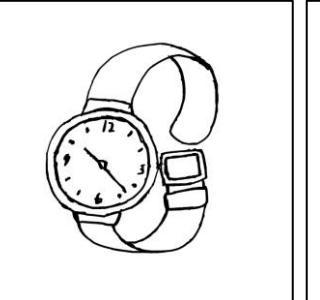
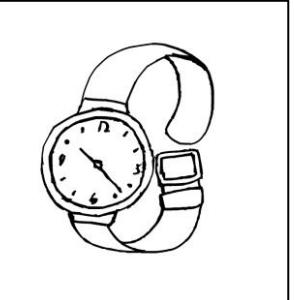
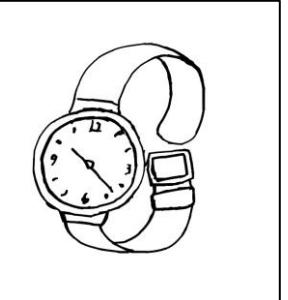
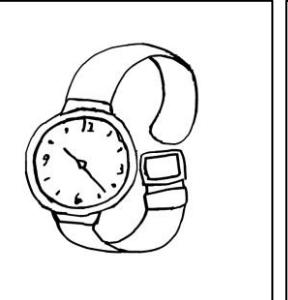
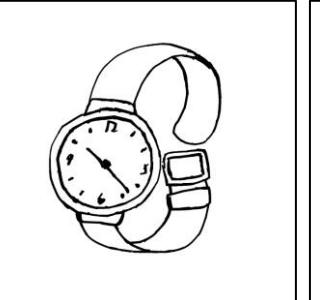
Adobe Illustrator



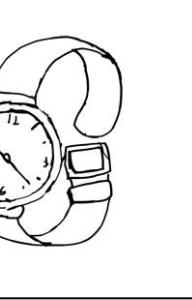
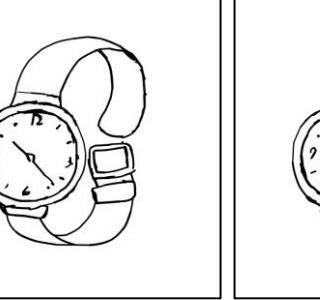
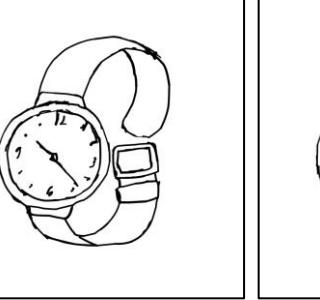
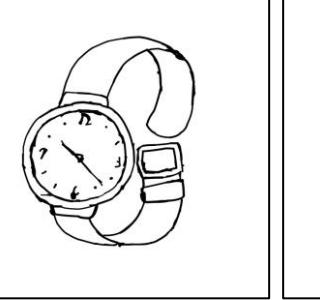
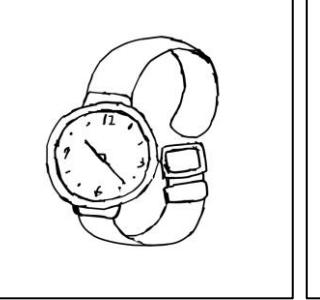
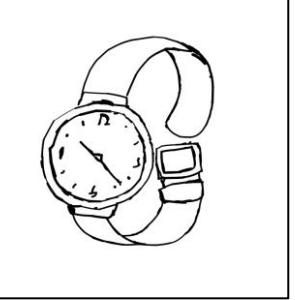
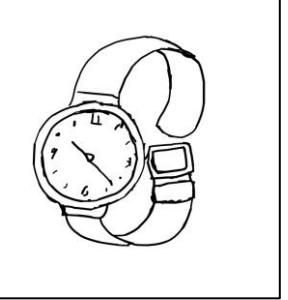
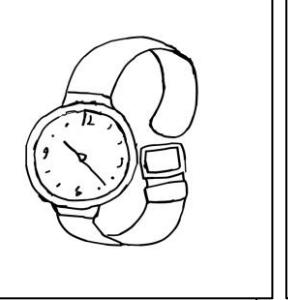
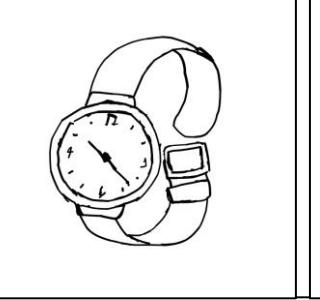
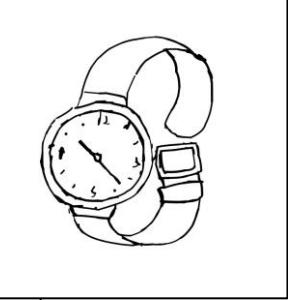
元画像を"test\_vectorization.py"で処理



前処理



前処理+"test\_vectorization.py"



前処理+"test\_vectorization.py"+後処理

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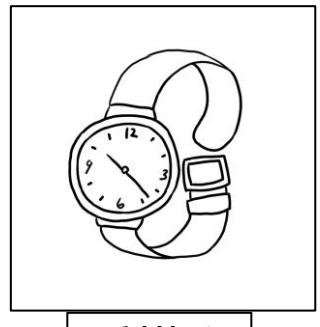
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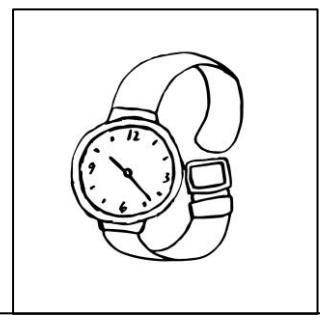
watch1000.png



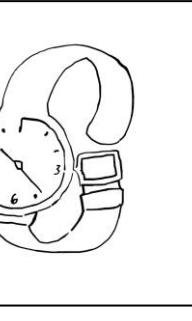
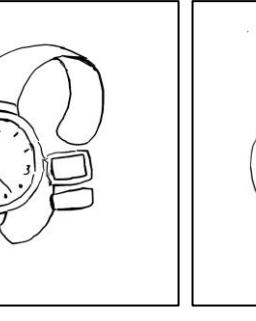
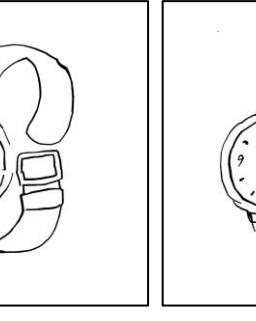
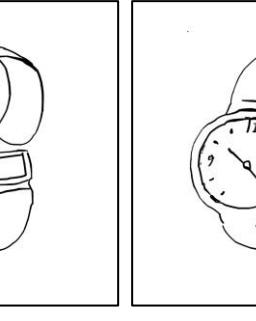
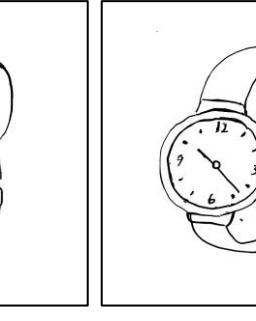
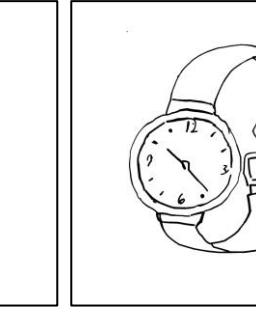
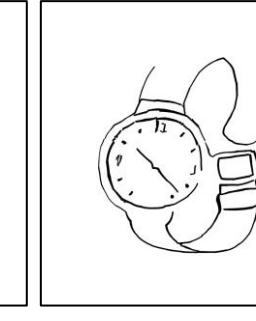
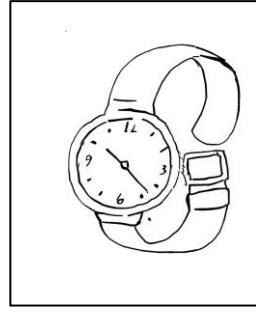
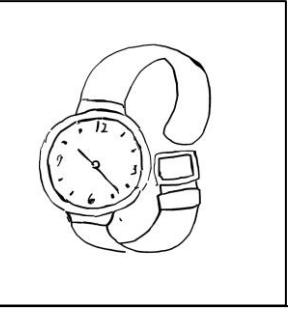
元画像



手描き



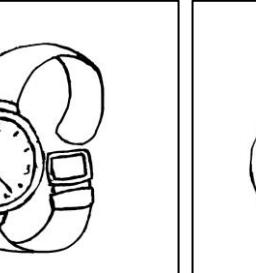
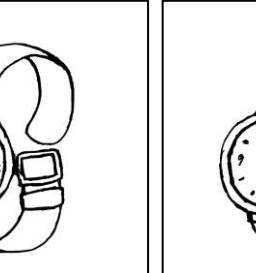
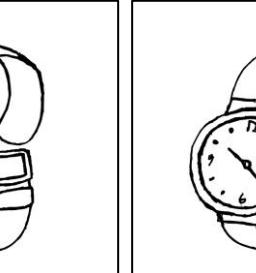
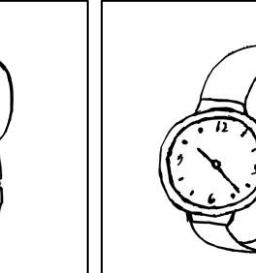
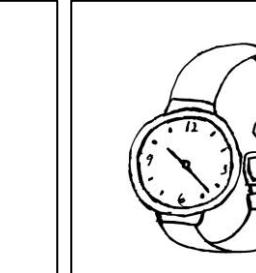
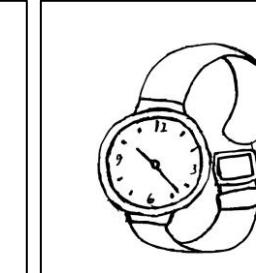
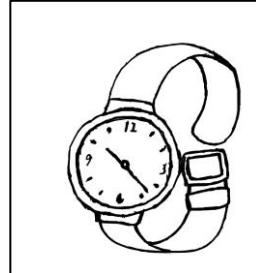
Adobe Illustrator



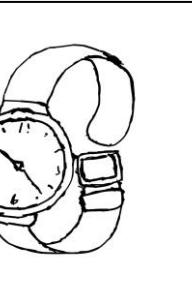
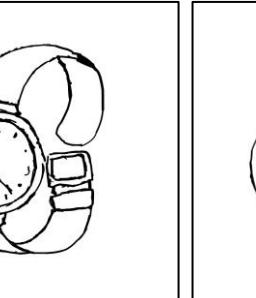
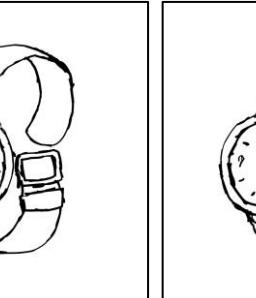
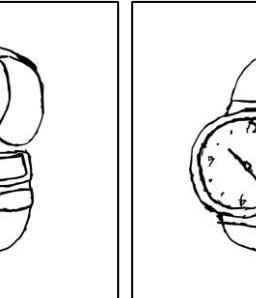
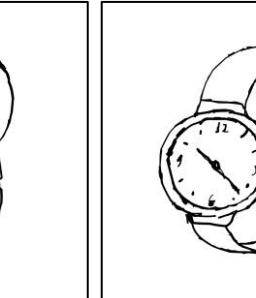
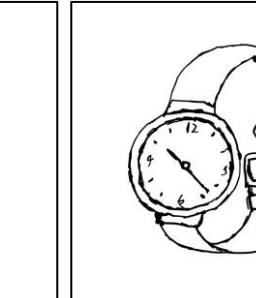
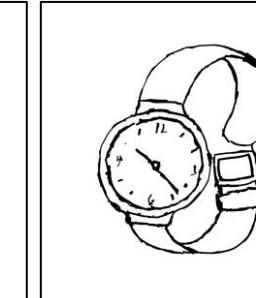
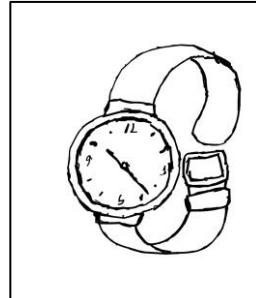
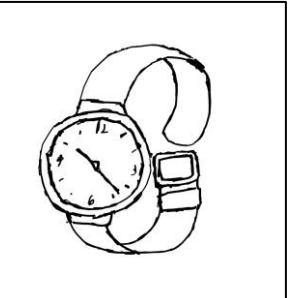
元画像を"test\_vectorization.py"で処理



前処理



前処理+"test\_vectorization.py"



前処理+"test\_vectorization.py"+後処理

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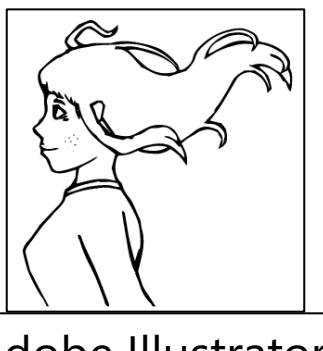
# woman320.png



元画像



手描き



Adobe Illustrator



元画像を"test\_vectorization.py"で処理



前処理



前処理+"test\_vectorization.py"



前処理+"test\_vectorization.py"+後処理

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# woman720.png



元画像



手描き



Adobe Illustrator



元画像を"test\_vectorization.py"で処理



前処理



前処理+"test\_vectorization.py"



前処理+"test\_vectorization.py"+後処理

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# woman1000.png



元画像



手描き



Adobe Illustrator



元画像を"test\_vectorization.py"で処理



前処理



前処理+"test\_vectorization.py"



前処理+"test\_vectorization.py"+後処理

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