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**Assignment due February 15th.**

**Results of 4 test cases for Rose.tif**

We notice that the result is less and less of a polygon as P decreases and for P=2, it is a perfect circle. For higher P, we can see that the contour lines have a lot of detail on the original boundary.

There are 100 point s (x,y) on the contour chosen around the rose manually by hand to begin with.

Below are the results of the manual snake and then the Inverse Fourier transform with various values of p.

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| --- | --- |
| **Snake\_Manual\_Result** |  |
| **P=80** Result of Inverse Fourier Transform keeping only first 80 terms of Fourier Transform |  |
| **P=50** Result of Inverse Fourier Transform keeping only first 50 terms of Fourier Transform |  |
| **P=20** Result of Inverse Fourier Transform keeping only first 20 terms of Fourier Transform |  |
| **P=10** Result of Inverse Fourier Transform keeping only first 10 terms of Fourier Transform |  |
| **P=5** Result of Inverse Fourier Transform keeping only first 5 terms of Fourier Transform |  |
| **P=3**  Result of Inverse Fourier Transform keeping only first 3 terms of Fourier Transform |  |
| **P=2** Result of Inverse Fourier Transform keeping only first 2 terms of Fourier Transform |  |

For this project, we reviewed the snake\_manual\_input code that Aashish Pandey and Dillon McDonald wrote as well as the code that Allison Goins and Jesus Rodriguez wrote. The code for both teams worked so we decided to use the code Aashish Pandey and Dillon McDonald wrote.