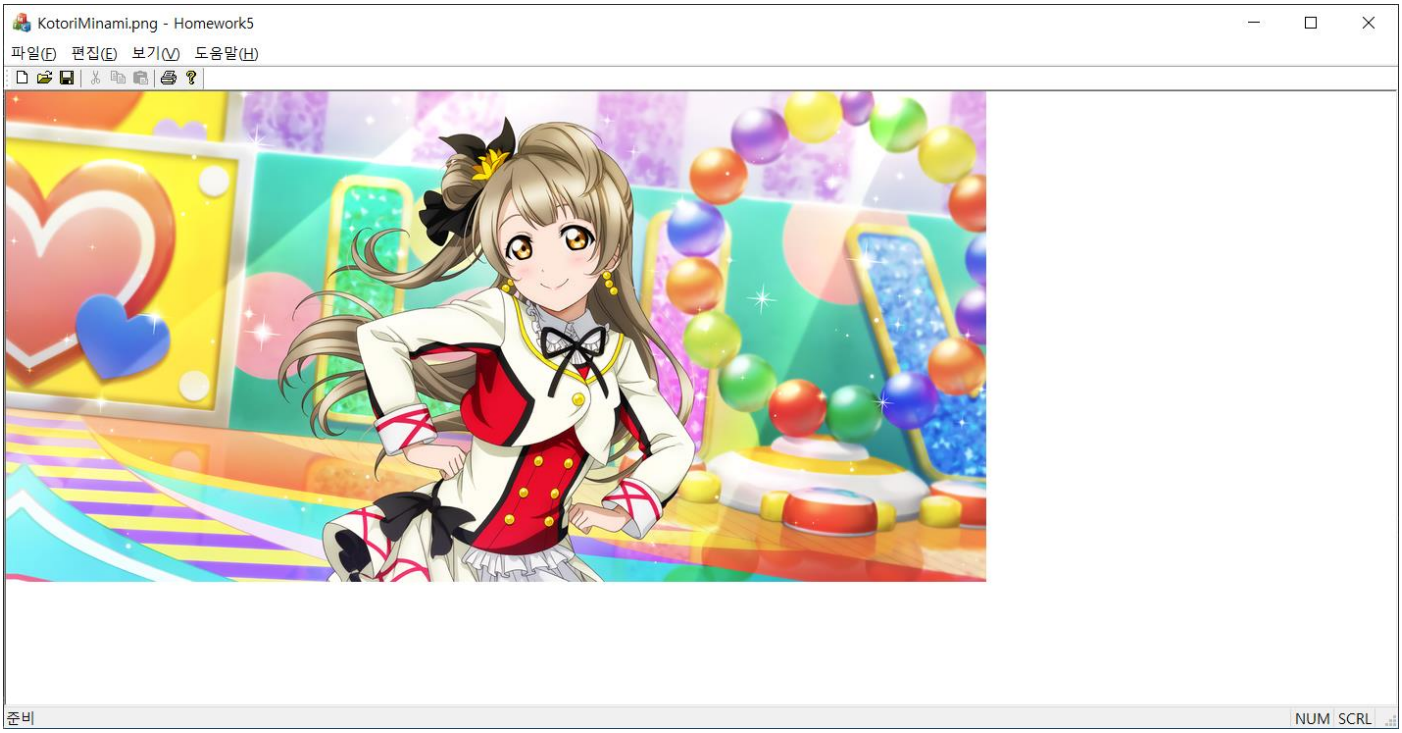
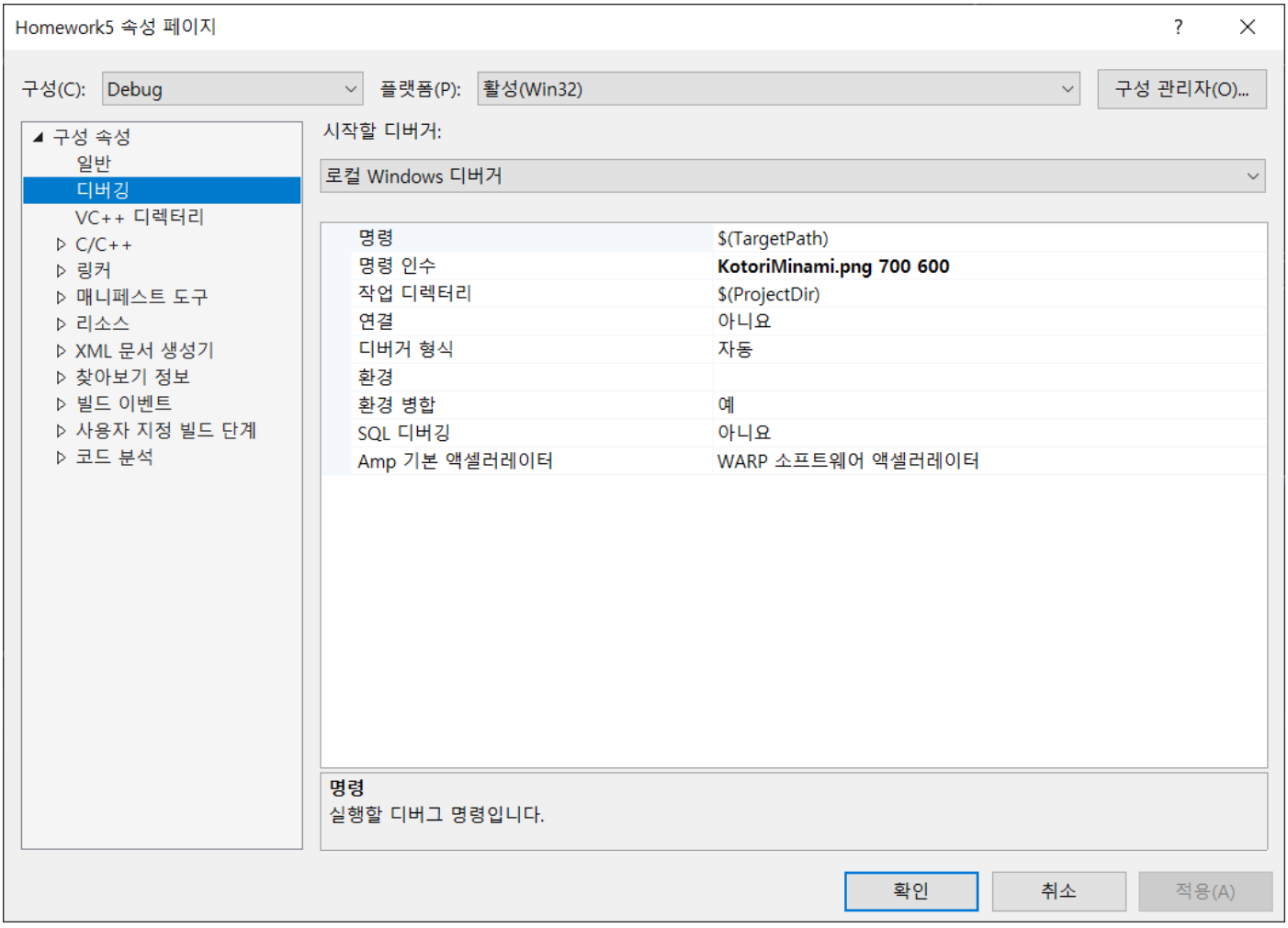

KotoriMinami.png - Homework5
파일(F) 편집(E) 보기(V) 도움말(H)
준비
NUM SCRL


Homework5 속성 페이지
구성(C): Debug
플랫폼(P): 활성(Win32)
구성 관리자(O)...
구성 속성
일반
디버깅
VC++ 디렉터리
C/C++
링커
매니페스트 도구
리소스
XML 문서 생성기
찾아보기 정보
빌드 이벤트
사용자 지정 빌드 단계
코드 분석
시작할 디버거:
로컬 Windows 디버거
명령 $(TargetPath)
명령 인수 KotoriMinami.png 700 600
작업 디렉터리 $(ProjectDir)
연결 아니요
디버거 형식 자동
환경
환경 병합 예
SQL 디버깅 아니요
Amp 기본 액셀러레이터 WARP 소프트웨어 액셀러레이터
명령
실행할 디버그 명령입니다.
확인
취소
적용(A)

To show resampled picture, I use bilinear interpolation method of NR in C (polin2.c)

I got inputs using command line debugger. Inputs are orderly exe-command, filename, width, height.

There are two kinds of problems that bilinear interpolation method and GetPixel, SetPixel method.

First, SetPixel is inefficient method because of the way how the function is working. By the references that I searched, what SetPixel(GetPixel) does is that lock the whole pixels, set the color and unlock the pixels ,rather access an address of the pixel and set the color. This is a reason why Its performance is getting low while input size are getting big. So, I try to override the functions, but I can not do that.

Second, Bilinear interpolation method of NR in C is also very very slow. It has O(n^5) time complexity!

If I make an input of 50*50 size of image then, it takes 50^5 of operations, roughly. I have to override the function. It is easy work compare to above one. Interpolating points are in the tabulated points that can be expressed floor and ceil function. Therefore, I can reduce its complexity to O(n^2).

Using bilinear interpolation, resampled picture is almost same as original one. I'm wondering that what's difference between bicubic.