

Programming Homework - Jpeg decoder SPEC

Basic Requirement:

1. Implement a JPEG baseline (sequential DCT-based) decoder
2. Correctly decode the assigned .jpg images into .bmp files.
3. Language: c/c++
4. Do not use any external libs, except writing to BMP file.
5. Submitted package *must* include:
 - (1) Source codes
 - (2) README which indicates how to compile and run your code. In your README file, at least, you should provide your environment, gcc version and so on.

We highly recommend you to prepare the README in with makefile syntax so that we can pack all your compilation and execution commands and invoke them by “make -f README”.

Bonus:

1. Implement a JPEG baseline encoder
2. Support other JPEG modes, e.g., progressive mode.
3. Provide a friendly graphical user interface.
4. Any practical improvement.

Note:

1. Slow decoding time will get some penalties.
2. Virus-infected package will get **0**.
3. The file name format should be: StudentID_Name.

E.x. R04922000_王小明.zip

4. Do **not** include any *obj* or language-dependent files in the submitted package. The ones with unreasonable file-size will get some penalties.
5. The environment of TA is Ubuntu 16.04 with gcc version 4.9.2.