Steganography Assignment Questions

Part 1

- a. Why should we avoid encoding information in the lowest bit layer (bit layer 0) of a JPEG image? Explain your answer. (2 marks)
- b. In what context is steganography considered a lawful and legitimate means of information hiding? Give two examples and explain your answer. (2 marks)
- c. Investigate and explain a known case of steganography-based exploitation in the real world. (2 marks)
- d. List and explain two methods for detecting the use of steganography. (2 marks)
- e. We have provided you with a polyglot: Question1.html. First open this file as an HTML. You will notice that the file opens as a web page. Now open this file as a JPEG file. Notice that it also opens as a JPEG. How does a polyglot achieve this and why would this be useful? (2 marks)

Part 2

We have given you an image: Question2.png. Find the hidden message embedded within it. Explain your steps, and list any commands that you used. (Hint: Looking into 'binwalk' might help you begin.) (2 marks).