A) ----------

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B) ----------

1) For cracking the password I have used the brute force technique by checking all the combinations of the 5 lettered word based on 26 alphabets. So am going to get 26 raised to power of 5 different combinations of passwords. Am running 5 for loops, one loop for each char to get all the combinations. Each password combination is checked with the MD5 hash value of original password and printed if there is a match.
2) Inorder to retrieve the copyrighted water mark from DCIM_2837 image, I first open my converted RGB image and get all the pixels into an array. The total number of pixels in the image is equal to height * width. While retrieving the pixels of image, I take the r,g,b values seperatly into 3 different arrays. Next step I take the lease significant bit of the binary form pixel value using modulus concept. I now have 3 arrays of bits for red, green and blue. Next I create 3 bit strings by concatenating the bits for each array. Next I convert the bitstring to ascii charecters by taking 8 bits to get one char. Hence on doing this process for all 3 colors I found that the copyrighted watermark is available in the green color pixel and the text is present in the output file.
3) Inorder to check if watermark is present on one of the 2 images of mountain or not, I use the same technique as the above and got the result. I first tried the mountain(copy) image first to check the watermark because the size of this file is greater than the other one so there are more chances of the presence of the watermark in larger image when 2 images looks similar. Hence obtained.

C) ----------

Watermark Notice:

Name of the picture file: DCIM_2837

D) ----------

Hidden Message :

Lost and insecure
You found me, you found me
Lyin' on the floor
Surrounded, surrounded
Why'd you have to wait?
Where were you? Where were you?
Just a little late
You found me, you found me
-- THE FRAY –

Name of the picture file: mountain (copy)

References I used to check the code syntax and the functionalities are:

http://effbot.org/imagingbook/introduction.htm

http://stackoverflow.com/questions/13167269/changing-pixel-color-python

http://stackoverflow.com/questions/7396849/convert-binary-to-ascii-and-vice-versa-python

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