LAHTP - Assignment 2

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The following assignment is about using String Handling in C programming. You need to do the validations requested using required In-Built Functions.

Regards,
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Question: Password Validation

Write a function that takes a password as a parameter, checks the password for its strength and returns an integer ranking from range 0-9 where 9 being the strongest password and 0 being the weakest password. The function must check for the following conditions.

1. Password must be minimum of 8 characters, else it is considered weak and can be ranked 0.
2. Password must have one Uppercase Character
3. Password must have three Lowercase Characters
4. Password must have one symbol
5. Password must have three Numeric Characters that are not sequential

Conditions:

• Satisfying all the above conditions can return 9 (strongest password)
• Satisfying none of the conditions above returns 0 (weakest password)
• Have a score for each condition and accordingly calculate the final rank.
• The function must return the rank as an integer which can the be checked in the main function.

Function Prototype:

```
int check_password(char *password);
```

How to Implement:

Write a `main` function that asks for a password from the user. Once password is received, pass it to the function `check_password` that you wrote and then return the rank 0-9 from the function. Depending on the rank, print a message telling if its **weakest** or **weak** or **average** or **medium** or **strong** or **strongest**. You are free to map the score to the message you want to display. Be creative.

Bonus (Try this if you can):

Usually In Linux based environments, passwords are being typed without being displayed (aka echoed) in the terminal. You might think of using scanf function to receive the password, but check this https://stackoverflow.com/questions/6856635/hide-password-input-on-terminal URL and try to implement a password mechanism that does not echo the password you type on screen, just like the SSH password that you type.