EXP NO.1 NS Aim: Design and implement for the insecurity of default passwords, printed passwords and password transmitted in plain text.

```
#include <stdio.h>
#include <ctype.h>
#include <string.h>
int main(void) {
char user[20];
printf("Enter your username: \n");
gets(user);
char pass[10];
printf("Enter your password: ");
scanf("%9s", pass);
int lower_count = 0, upper_count = 0, digit_count = 0, punct_count = 0;
for (int i = 0; i < strlen(pass); i++) {
if (islower(pass[i])) lower_count++;
if (isupper(pass[i])) upper_count++;
if (isdigit(pass[i])) digit_count++;
if (ispunct(pass[i])) punct_count++;
printf("* ");
}
if (strlen(pass) < 8) {
printf("The password must have at least 8 characters\n");
return 1;
}
if (lower_count == 0) printf("You need a lowercase letter\n");
if (upper_count == 0) printf("You need an uppercase letter\n");
if (digit_count == 0) printf("You need digits\n");
if (punct_count == 0) printf("You need a special character\n");
if (lower_count != 0 && upper_count != 0 && digit_count != 0 && punct_count != 0)
printf("Your password is 100 percent strong!\n");
```

```
else if (upper_count != 0 && punct_count != 0 && digit_count != 0 && strlen(pass) >= 8)
printf("Your password is correct 80 percent strong!\n");
else if (lower_count != 0 && digit_count != 0 && punct_count != 0 && strlen(pass) >= 6)
printf("Your password is 60 percent strong\n");
else if (lower_count != 0 && upper_count != 0 && strlen(pass) >= 4)
printf("Your password is 40 percent strong\n");
else if (lower_count != 0 && strlen(pass) >= 4)
printf("Your password is 20 percent strong\n");
else
printf("Your password is incorrect!\n");
return 0;
}
```