

2. A password is said to be strong if it satisfies the following criteria:

It contains at least one lowercase English character.

It contains at least one uppercase English character.

It contains at least one special character.

The special characters are: !@#\$%^&\*()-+`

Its length is at least 8.

It contains at least one digit. Given a string, find its strength.

```
#include <stdio.h>
```

```
#include <stdbool.h>
```

```
#include <string.h>
```

```
// Function to check if a character is a special character
```

```
bool isSpecialChar(char ch) {
```

```
    char specialChars[] = "!@#$%^&*()-+`";
```

```
    for (int i = 0; i < strlen(specialChars); i++) {
```

```
        if (ch == specialChars[i]) {
```

```
            return true;
```

```
        }
```

```
    }
```

```
    return false;
```

```
}
```

```
// Function to check password strength
```

```
void checkPasswordStrength(char password[]) {
```

```
    int length = strlen(password);
```

```
    bool hasLower = false, hasUpper = false, hasSpecial = false, hasDigit = false;
```

```
    for (int i = 0; i < length; i++) {
```

```
        if (islower(password[i])) {
```

```
            hasLower = true;
```

```
        } else if (isupper(password[i])) {
```

```
            hasUpper = true;
```

```
        } else if (isSpecialChar(password[i])) {
```

```
            hasSpecial = true;
```

```
} else if (isdigit(password[i])) {  
    hasDigit = true;  
}  
  
}  
  
if (length >= 8 && hasLower && hasUpper && hasSpecial && hasDigit) {  
    printf("Password is strong.\n");  
} else {  
    printf("Password is not strong.\n");  
}  
  
}  
  
int main() {  
    char password[50];  
    // Input password from the user  
    printf("Enter the password: ");  
    scanf("%s", password);  
    // Check password strength  
    checkPasswordStrength(password);  
    return 0;  
}
```

**Output:**

Enter the password: 5263

Password is not strong