

How to check strength of a password

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

A Password must contain at least one lowercase English character.

It should have at least one uppercase English character.

It must have at least one special character.

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

Its length should be at least 8.

It should contain at least one digit.

For example: - Given a string, find its strength. Let a strong password is one that satisfies all above conditions and a moderate password is one that satisfies first three conditions and has length at least 6. Otherwise, password is weak.

Input: "TOM & j3rry! @1"

Output: Strong

Input: "Abc!@123"

Output: Moderate

#Python program to check if a given password is strong or not

```
def printStrongNess(input_string):
```

```
    n = len(input_string)
```

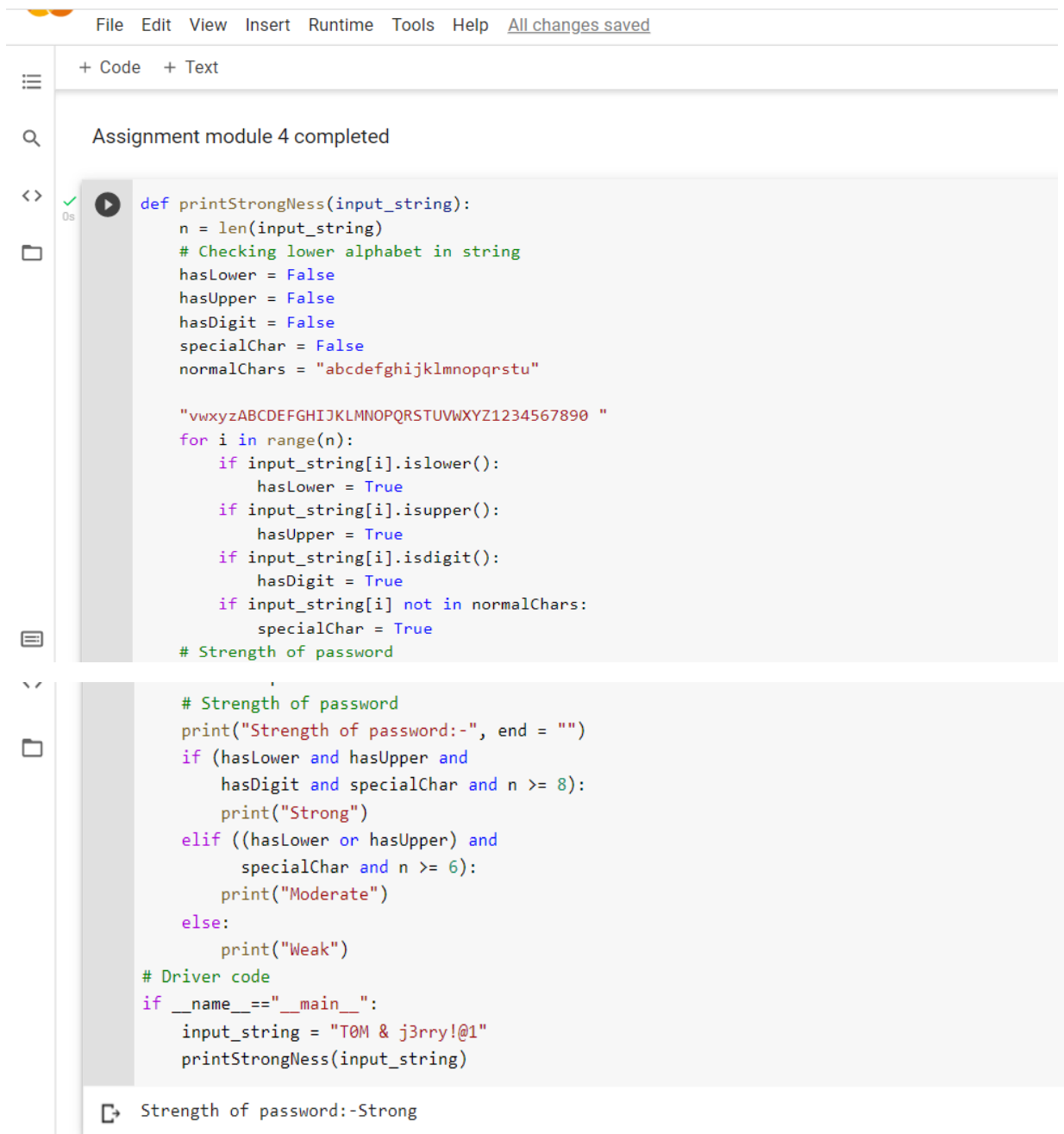
```
    # Checking lower alphabet in string
```

```
    hasLower = False
```

```
hasUpper = False
hasDigit = False
specialChar = False
normalChars = "abcdefghijklmnopqrstuvwxyz"

"vwxyzABCDEFGHIJKLMNOPQRSTUVWXYZ1234567890 "
for i in range(n):
    if input_string[i].islower():
        hasLower = True
    if input_string[i].isupper():
        hasUpper = True
    if input_string[i].isdigit():
        hasDigit = True
    if input_string[i] not in normalChars:
        specialChar = True
# Strength of password
print("Strength of password:-", end = "")
if (hasLower and hasUpper and
    hasDigit and specialChar and n >= 8):
    print("Strong")
elif ((hasLower or hasUpper) and
    specialChar and n >= 6):
    print("Moderate")
else:
    print("Weak")
# Driver code
```

```
if __name__=="__main__":  
    input_string = "T0M & j3rry!@1"  
    printStrongNess(input_string)
```



The screenshot shows a code editor with a menu bar (File, Edit, View, Insert, Runtime, Tools, Help) and a status bar (All changes saved). The editor has a sidebar with icons for file explorer, search, and code execution. The main area displays the following Python code:

```
def printStrongNess(input_string):  
    n = len(input_string)  
    # Checking lower alphabet in string  
    hasLower = False  
    hasUpper = False  
    hasDigit = False  
    specialChar = False  
    normalChars = "abcdefghijklmnopqrstuvwxyz"  
  
    "vwxyzABCDEFGHJKLMNOPQRSTUVWXYZ1234567890 "  
    for i in range(n):  
        if input_string[i].islower():  
            hasLower = True  
        if input_string[i].isupper():  
            hasUpper = True  
        if input_string[i].isdigit():  
            hasDigit = True  
        if input_string[i] not in normalChars:  
            specialChar = True  
    # Strength of password  
  
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    print("Strength of password:-", end = "")  
    if (hasLower and hasUpper and  
        hasDigit and specialChar and n >= 8):  
        print("Strong")  
    elif ((hasLower or hasUpper) and  
          specialChar and n >= 6):  
        print("Moderate")  
    else:  
        print("Weak")  
# Driver code  
if __name__=="__main__":  
    input_string = "T0M & j3rry!@1"  
    printStrongNess(input_string)
```

The output of the program is displayed at the bottom: Strength of password:-Strong