Q.11) Write a Python program to check the validity of a password given by the user

```python
import re

def password_validity(password):

    if len(password) < 8:
    return "Password must be at least 8 characters long."

    if not re.search("[a-z]", password):
    return "Password must contain at least one lowercase letter."

    if not re.search("[A-Z]", password):
    return "Password must contain at least one uppercase letter."

    if not re.search("[0-9]", password):
    return "Password must contain at least one digit."

    if not re.search("[@#$%^&+=]", password):
    return "Password must contain at least one special character (@, #, $, %, ^, &, +, =)."

    return "Password is valid."

user_password = input("Enter a password: ")

validate_result = password_validity(user_password)

print(validate_result)
```