TASK 6:
Password strength checker using passwordmeter.

Additions		Type	Rate	Count	Bonus
❌	Number of Characters	Flat	+(n*4)	0	0
❌	Uppercase Letters	Cond/Incr	+((len-n)*2)	0	0
❌	Lowercase Letters	Cond/Incr	+((len-n)*2)	0	0
❌	Numbers	Cond	+(n*4)	0	0
❌	Symbols	Flat	+(n*6)	0	0
❌	Middle Numbers or Symbols	Flat	+(n*2)	0	0
❌	Requirements	Flat	+(n*2)	0	0
Deductions					
✅	Letters Only	Flat	-n	0	0
✅	Numbers Only	Flat	-n	0	0
✅	Repeat Characters (Case Insensitive)	Comp	-	0	0
✅	Consecutive Uppercase Letters	Flat	-(n*2)	0	0
✅	Consecutive Lowercase Letters	Flat	-(n*2)	0	0
✅	Consecutive Numbers	Flat	-(n*2)	0	0
✅	Sequential Letters (3+)	Flat	-(n*3)	0	0
✅	Sequential Numbers (3+)	Flat	-(n*3)	0	0
✅	Sequential Symbols (3+)	Flat	-(n*3)	0	0

It is an website which is used to analyze and give a report about our password's strength based on the points using formulas.

Password:	daredevi 123				
Hide:	☐				
Score:	50%				
Complexity:	Good				

- Minimum 8 characters in length
- Contains 3/4 of the following items:
  - Uppercase Letters
  - Lowercase Letters
  - Numbers
  - Symbols

Additions		**Type**	**Rate**	**Count**	**Bonus**
✴	Number of Characters	Flat	+(n*4)	12	+ 48
✖	Uppercase Letters	Cond/Incr	+((len-n)*2)	0	0
✴	Lowercase Letters	Cond/Incr	+((len-n)*2)	8	+ 8
✴	Numbers	Cond	+(n*4)	3	+ 12
✖	Symbols	Flat	+(n*6)	0	0
✴	Middle Numbers or Symbols	Flat	+(n*2)	2	+ 4
✖	Requirements	Flat	+(n*2)	3	0
Deductions					
✔	Letters Only	Flat	-n	0	0
✔	Numbers Only	Flat	-n	0	0
⚠	Repeat Characters (Case Insensitive)	Comp	-	4	- 1
✔	Consecutive Uppercase Letters	Flat	-(n*2)	0	0
⚠	Consecutive Lowercase Letters	Flat	-(n*2)	7	- 14
⚠	Consecutive Numbers	Flat	-(n*2)	2	- 4
✔	Sequential Letters (3+)	Flat	-(n*3)	0	0
⚠	Sequential Numbers (3+)	Flat	-(n*3)	1	- 3
✔	Sequential Symbols (3+)	Flat	-(n*3)	0	0

This is most commonly using passwords among most of them as the continuous and predictable characters we see its having the lowest credentials.
1.continous characters
2.Easy prediction

Password:	daredevi 123				
Hide:	☐				
Score:	50%				
Complexity:	Good				

- Minimum 8 characters in length
- Contains 3/4 of the following items:
  - Uppercase Letters
  - Lowercase Letters
  - Numbers
  - Symbols

Additions		Type	Rate	Count	Bonus
✴	Number of Characters	Flat	$+(n*4)$	12	+ 48
✖	Uppercase Letters	Cond/Incr	$+((len-n)*2)$	0	0
✴	Lowercase Letters	Cond/Incr	$+((len-n)*2)$	8	+ 8
✴	Numbers	Cond	$+(n*4)$	3	+ 12
✖	Symbols	Flat	$+(n*6)$	0	0
✴	Middle Numbers or Symbols	Flat	$+(n*2)$	2	+ 4
✖	Requirements	Flat	$+(n*2)$	3	0
Deductions					
✔	Letters Only	Flat	$-n$	0	0
✔	Numbers Only	Flat	$-n$	0	0
⚠	Repeat Characters (Case Insensitive)	Comp	-	4	- 1
✔	Consecutive Uppercase Letters	Flat	$-(n*2)$	0	0
⚠	Consecutive Lowercase Letters	Flat	$-(n*2)$	7	- 14
⚠	Consecutive Numbers	Flat	$-(n*2)$	2	- 4
✔	Sequential Letters (3+)	Flat	$-(n*3)$	0	0
⚠	Sequential Numbers (3+)	Flat	$-(n*3)$	1	- 3
✔	Sequential Symbols (3+)	Flat	$-(n*3)$	0	0

This one may be looks better than the previous one Because it has the combination of alphabets and numbers. But even this not the protected one, using the username, or famous characters name and a series of numbers.

1. username or favourite characters name
2. absence of uppercase and symbols
3. common predictable natural numbers

	Password:	My age is @ 21		• Minimum 8 characters in length

Password:	My age is @ 21	• Minimum 8 characters in length
Hide:	☐	• Contains 3/4 of the following items:

Score:	100%	- Uppercase Letters
		  - Lowercase Letters
		  - Numbers

Complexity:	Very Strong	- Symbols

Additions		Type	Rate	Count	Bonus
✴	Number of Characters	Flat	+(n*4)	14	+ 56
✅	Uppercase Letters	Cond/Incr	+((len-n)*2)	1	+ 26
✴	Lowercase Letters	Cond/Incr	+((len-n)*2)	6	+ 16
✴	Numbers	Cond	+(n*4)	2	+ 8
✅	Symbols	Flat	+(n*6)	1	+ 6
✴	Middle Numbers or Symbols	Flat	+(n*2)	2	+ 4
✴	Requirements	Flat	+(n*2)	5	+ 10

Deductions		Type	Rate	Count	Bonus
✅	Letters Only	Flat	-n	0	0
✅	Numbers Only	Flat	-n	0	0
✅	Repeat Characters (Case Insensitive)	Comp	-	0	0
✅	Consecutive Uppercase Letters	Flat	-(n*2)	0	0
⚠	Consecutive Lowercase Letters	Flat	-(n*2)	5	– 10
⚠	Consecutive Numbers	Flat	-(n*2)	1	– 2
✅	Sequential Letters (3+)	Flat	-(n*3)	0	0
✅	Sequential Numbers (3+)	Flat	-(n*3)	0	0
✅	Sequential Symbols (3+)	Flat	-(n*3)	0	0

Comparing to the two attempts this one way more secure than previous one. Because its not having a series of predictable natural number or username or character name, Special characters and space between characters and lower-uppercase characters are present in here.
But even it not the most protected or strongest password.
1.series of number (1,2)
2.most of them are lower case

My Learning and Understanding:
From using the PasswordMeter tool, I learned how passwords are evaluated based on both additions (factors that make passwords stronger, like length, mixed case letters, numbers, symbols, and placement of characters) and deductions (patterns that make passwords weaker, like only letters/numbers, repeated characters, or sequential patterns). I now understand how each element in a password contributes positively or negatively to its overall strength score. This helped me realize the importance of creating passwords that are long, unique, and unpredictable, using a mix of character types and avoiding simple patterns.

TIPS
Each element is convert or encpyted into a cipher text (using **RSA**) to protect it from the third persons.
Even giving a space between the characters is also play a role by giving a certaing values.
From this understand the importance of privacy and credentials.