

Case 1: run through all options

```
Console
<terminated> week2options.py [C:\Users\nor67\AppData\Local\Programs\Python\Python38-32\python.exe]

a. Generate Secure Password
b. Calculate and Format a Percentage
c. How many days from today until July 4, 2025?
d. Use the Law of Cosines to calculate the leg of a triangle.
e. Calculate the volume of a Right Circular Cylinder
f. Exit program

Enter a letter from the menu options: a
Length of password? (8-20) 10
Use upper case letters? (yes/no) yes
Use lower case letters? (yes/no) yes
Use numbers? (yes/no) yes
Use special characters? (yes/no) yes

Created password: *&eUPBUr?*
```

```
a. Generate Secure Password
b. Calculate and Format a Percentage
c. How many days from today until July 4, 2025?
d. Use the Law of Cosines to calculate the leg of a triangle.
e. Calculate the volume of a Right Circular Cylinder
f. Exit program

Enter a letter from the menu options: b
Enter the numerator: 5
Enter the denominator: 6
Enter the number of decimal points: 3

Percentage is 83.333%
```

```
a. Generate Secure Password
b. Calculate and Format a Percentage
c. How many days from today until July 4, 2025?
d. Use the Law of Cosines to calculate the leg of a triangle.
e. Calculate the volume of a Right Circular Cylinder
f. Exit program

Enter a letter from the menu options: c
```

Case 1

```
Console
<terminated> week2options.py [C:\Users\nor67\AppData\Local\Programs\Python\Python38-32\python.exe]
f. Exit program

Enter a letter from the menu options: c

The number of days to July 4th 2025 from today is: 1769

a. Generate Secure Password
b. Calculate and Format a Percentage
c. How many days from today until July 4, 2025?
d. Use the Law of Cosines to calculate the leg of a triangle.
e. Calculate the volume of a Right Circular Cylinder
f. Exit program

Enter a letter from the menu options: d

Enter length of one side of the triangle: 4
Enter the length of the other side of the triangle: 5
Enter the angle between the sides in degrees: 50
The length of the 3rd side of the triangle is: 3.91

a. Generate Secure Password
b. Calculate and Format a Percentage
c. How many days from today until July 4, 2025?
d. Use the Law of Cosines to calculate the leg of a triangle.
e. Calculate the volume of a Right Circular Cylinder
f. Exit program

Enter a letter from the menu options: e
Enter the radius: 6
Enter the height: 7
The volume of the cylinder is 791.681

a. Generate Secure Password
b. Calculate and Format a Percentage
c. How many days from today until July 4, 2025?
d. Use the Law of Cosines to calculate the leg of a triangle.
e. Calculate the volume of a Right Circular Cylinder
f. Exit program

Enter a letter from the menu options: f

Thank you for visiting. Good day.
```

Case 2: invalid input and pw upper case letters & numbers

```
Console
week2options.py [C:\Users\nor67\AppData\Local\Programs\Python\Python38-32\python.exe]

a. Generate Secure Password
b. Calculate and Format a Percentage
c. How many days from today until July 4, 2025?
d. Use the Law of Cosines to calculate the leg of a triangle.
e. Calculate the volume of a Right Circular Cylinder
f. Exit program

Enter a letter from the menu options: 4s7
Invalid Entry.
Enter a, b, c, d, e, or f: a
Length of password? (8-20) 5
Invalid Entry.
Enter a length between 8-20: 22
Invalid Entry.
Enter a length between 8-20: 8
Use upper case letters? (yes/no) 4s7
Invalid entry.
Enter "yes" or "no".
Use upper case letters? no
Use lower case letters? (yes/no) 4s7
Invalid entry.
Enter "yes" or "no".
Use lower case letters? no
Use numbers? (yes/no) 4s7
Invalid entry.
Enter "yes" or "no".
Use numbers? no
Use special characters? (yes/no) 4s7
Invalid entry.
Enter "yes" or "no".
Use special characters? no
All options cannot be "no".

Length of password? (8-20) 8
Use upper case letters? (yes/no) yes
Use lower case letters? (yes/no) no
Use numbers? (yes/no) yes
Use special characters? (yes/no) no

Created password: RTFP4RGF
```

Case 2

```
Console
week2options.py [C:\Users\nor67\AppData\Local\Programs\Python\Python38-32\python.exe]
Created password: RTFP4RGF

a. Generate Secure Password
b. Calculate and Format a Percentage
c. How many days from today until July 4, 2025?
d. Use the Law of Cosines to calculate the leg of a triangle.
e. Calculate the volume of a Right Circular Cylinder
f. Exit program

Enter a letter from the menu options: b
Enter the numerator: 4sy
Invalid entry.
Enter the numerator (ex. 5.2): 5.2
Enter the denominator: 4s7
Invalid entry.
Enter the denominator (ex. 5.2): 52.356
Enter the number of decimal points: 4

Percentage is 9.932%

a. Generate Secure Password
b. Calculate and Format a Percentage
c. How many days from today until July 4, 2025?
d. Use the Law of Cosines to calculate the leg of a triangle.
e. Calculate the volume of a Right Circular Cylinder
f. Exit program

Enter a letter from the menu options: d

Enter length of one side of the triangle: 4s7
Invalid entry.
Enter the length of one side (ex. 5.2): 5.23
Enter the length of the other side of the triangle: 4s7
Invalid entry.
Enter the length of the other side (ex. 5.2): 3.68
Enter the angle between the sides in degrees: 47.65

The length of the 3rd side of the triangle is: 3.868
```

Case 2

```
Console
week2options.py [C:\Users\nor67\AppData\Local\Programs\Python\Python38-32\python.exe]
b. Calculate and Format a Percentage
c. How many days from today until July 4, 2025?
d. Use the Law of Cosines to calculate the leg of a triangle.
e. Calculate the volume of a Right Circular Cylinder
f. Exit program

Enter a letter from the menu options: d

Enter length of one side of the triangle: 4s7
Invalid entry.
Enter the length of one side (ex. 5.2): 5.23
Enter the length of the other side of the triangle: 4s7
Invalid entry.
Enter the length of the other side (ex. 5.2): 3.68
Enter the angle between the sides in degrees: 47.65

The length of the 3rd side of the triangle is: 3.868

a. Generate Secure Password
b. Calculate and Format a Percentage
c. How many days from today until July 4, 2025?
d. Use the Law of Cosines to calculate the leg of a triangle.
e. Calculate the volume of a Right Circular Cylinder
f. Exit program

Enter a letter from the menu options: e
Enter the radius: 4s7
Invalid entry.
Enter the radius (ex. 5.2): 5.23
Enter the height: 4s7
Invalid entry.
Enter the height (ex. 5.2): 6.987

The volume of the cylinder is 600.405

a. Generate Secure Password
b. Calculate and Format a Percentage
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d. Use the Law of Cosines to calculate the leg of a triangle.
e. Calculate the volume of a Right Circular Cylinder
f. Exit program

Enter a letter from the menu options:
<
```

Case 3: pw only upper case

```
Console
week2options.py [C:\Users\nor67\AppData\Local\Programs\Python\Python38-32\python.exe]

a. Generate Secure Password
b. Calculate and Format a Percentage
c. How many days from today until July 4, 2025?
d. Use the Law of Cosines to calculate the leg of a triangle.
e. Calculate the volume of a Right Circular Cylinder
f. Exit program

Enter a letter from the menu options: a
Length of password? (8-20) 12
Use upper case letters? (yes/no) yes
Use lower case letters? (yes/no) no
Use numbers? (yes/no) no
Use special characters? (yes/no) no

Created password: EAOVLXUEVAAT

a. Generate Secure Password
b. Calculate and Format a Percentage
```

Case 4: pw no letters

```
Console
week2options.py [C:\Users\nor67\AppData\Local\Programs\Python\Python38-32\python.exe]

a. Generate Secure Password
b. Calculate and Format a Percentage
c. How many days from today until July 4, 2025?
d. Use the Law of Cosines to calculate the leg of a triangle.
e. Calculate the volume of a Right Circular Cylinder
f. Exit program

Enter a letter from the menu options: a
Length of password? (8-20) 14
Use upper case letters? (yes/no) no
Use lower case letters? (yes/no) no
Use numbers? (yes/no) yes
Use special characters? (yes/no) yes

Created password: <&$|/^1{#2)4"$
```

Case 5: pw lower case and special characters

```
Console
week2options.py [C:\Users\nor67\AppData\Local\Programs\Python\Python38-32\python.exe]

a. Generate Secure Password
b. Calculate and Format a Percentage
c. How many days from today until July 4, 2025?
d. Use the Law of Cosines to calculate the leg of a triangle.
e. Calculate the volume of a Right Circular Cylinder
f. Exit program

Enter a letter from the menu options: a
Length of password? (8-20) 16
Use upper case letters? (yes/no) no
Use lower case letters? (yes/no) yes
Use numbers? (yes/no) no
Use special characters? (yes/no) yes

Created password: *-o~m:f]@bul`jdu
```