```
PS C:\Users\Ritu\Desktop> & "C:/Program Files/Python312/python.exe" c:/Users/Ritu/Desktop/Pro-7.py

... Multi-Utility Toolkit ...
1. Datetime and Time Operations
2. Mathematical Operations
3. Random Data Generation
4. Generate Unique Identifiers (UUID)
5. File Operations (Custom Module)
6. Explore Module Attributes (dir())
7. Exit
Enter your choice: 1
... Datetime and Time Operations...
1. Show Current Date and Time
2. Calculate Difference Between Two Dates/Times
3. Format Date into custom format
4. Stopwatch
5. Countdown Timer
6. Exit
Enter your choice: 1
Current Date and Time: 2026-01-08 01:46:37.131995
... Datetime and Time Operations...
1. Show Current Date and Time
2. Calculate Difference Between Two Dates/Times
3. Format Date into custom format
4. Stopwatch
5. Countdown Timer
6. Exit
Enter your choice: 2
Enter first date (YYYY-MM-DD): 2005-03-20
Enter second date (YYYY-MM-DD): 2004-01-28
Difference: 417 days, 0:00:00
... Datetime and Time Operations...
1. Show Current Date and Time
2. Calculate Difference Between Two Dates/Times
3. Format Date into custom format
4. Stopwatch
5. Countdown Timer
6. Exit
Enter your choice: 3
```

```
Enter your choice: 3
Formatted Date: Thu Jan  8 01:47:00 2026
... Datetime and Time Operations...
1. Show Current Date and Time
2. Calculate Difference Between Two Dates/Times
3. Format Date into custom format
4. Stopwatch
5. Countdown Timer
6. Exit
Enter your choice: 4
start...1
stop...4
Elapsed time: 0 minutes 1 seconds
... Datetime and Time Operations...
1. Show Current Date and Time
2. Calculate Difference Between Two Dates/Times
3. Format Date into custom format
4. Stopwatch
5. Countdown Timer
6. Exit
Enter your choice: 5
Enter countdown time in seconds: 1
Time left: 1 seconds
Time's up!
... Datetime and Time Operations...
1. Show Current Date and Time
2. Calculate Difference Between Two Dates/Times
3. Format Date into custom format
4. Stopwatch
5. Countdown Timer
6. Exit
Enter your choice: 6

... Multi-Utility Toolkit ...
1. Datetime and Time Operations
2. Mathematical Operations
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4. Generate Unique Identifiers (UUID)
5. File Operations (Custom Module)
```

```
6. Explore Module Attributes (dir())
7. Exit
Enter your choice: 2

 ..Mathematical Operations..
1. Basic Arithmetic
2. Trigonometry (sin, cos, tan)
3. Factorial
4. Logarithm
5. Interest Calculator
6. Geometric Shapes (Area & Perimeter)
7.Exit
Enter your choice: 1
Enter first number: 20
Enter second number: 30
Add: 50.0, Sub: -10.0, Mul: 600.0, Div: 0.6666666666666666

 ..Mathematical Operations..
1. Basic Arithmetic
2. Trigonometry (sin, cos, tan)
3. Factorial
4. Logarithm
5. Interest Calculator
6. Geometric Shapes (Area & Perimeter)
7.Exit
Enter your choice: 2
Enter angle in degrees: 45
sin: 0.7071067811865476, cos: 0.7071067811865476, tan: 0.9999999999999999

 ..Mathematical Operations..
1. Basic Arithmetic
2. Trigonometry (sin, cos, tan)
3. Factorial
4. Logarithm
5. Interest Calculator
6. Geometric Shapes (Area & Perimeter)
7.Exit
Enter your choice: 3
Enter a number: 5
```

```
Enter a number: 5
Factorial: 120

 ..Mathematical Operations..
1. Basic Arithmetic
2. Trigonometry (sin, cos, tan)
3. Factorial
4. Logarithm
5. Interest Calculator
6. Geometric Shapes (Area & Perimeter)
7.Exit
Enter your choice: 4
Enter a number: 4
Enter base (default is e): 2
Log: 2.0

 ..Mathematical Operations..
1. Basic Arithmetic
2. Trigonometry (sin, cos, tan)
3. Factorial
4. Logarithm
5. Interest Calculator
6. Geometric Shapes (Area & Perimeter)
7.Exit
Enter your choice: 5
Principal: 1000
Rate (%): 5
Time (years): 2
Compounded per year: 4
Compound Interest Amount: 1104.49

 ..Mathematical Operations..
1. Basic Arithmetic
2. Trigonometry (sin, cos, tan)
3. Factorial
4. Logarithm
5. Interest Calculator
6. Geometric Shapes (Area & Perimeter)
7.Exit
```

```
Enter your choice: 6

...Geometric Shapes...
1. Square
2. Rectangle
3. Circle
4. Triangle
5. Exit
Choose shape: 1
Enter side length: 2
Area: 4.0, Perimeter: 8.0

...Geometric Shapes...
1. Square
2. Rectangle
3. Circle
4. Triangle
5. Exit
Choose shape: 2
Enter length: 5
Enter width: 6
Area: 30.0, Perimeter: 22.0

...Geometric Shapes...
1. Square
2. Rectangle
3. Circle
4. Triangle
5. Exit
Choose shape: 3
Enter radius: 3
Area: 28.27, Circumference: 18.85

...Geometric Shapes...
1. Square
2. Rectangle
3. Circle
4. Triangle
5. Exit
```

```
5. Exit
Choose shape: 4
Enter side a: 2
Enter side b: 3
Enter side c: 4
Area: 2.90, Perimeter: 9.0

...Geometric Shapes...
1. Square
2. Rectangle
3. Circle
4. Triangle
5. Exit
Choose shape: 5

..Mathematical Operations..
1. Basic Arithmetic
2. Trigonometry (sin, cos, tan)
3. Factorial
4. Logarithm
5. Interest Calculator
6. Geometric Shapes (Area & Perimeter)
7.Exit
Enter your choice: 7

... Multi-Utility Toolkit ...
1. Datetime and Time Operations
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4. Generate Unique Identifiers (UUID)
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6. Explore Module Attributes (dir())
7. Exit
Enter your choice: 3

..Random Data Generation..
1. Generate Random Number
2. Random Password
3. Random Sample from List
```

```
3. Random Sample from List
4. Generate OTP
5.Exit
Enter your choice: 1
Random number (1-100): 8

..Random Data Generation..
1. Generate Random Number
2. Random Password
3. Random Sample from List
4. Generate OTP
5.Exit
Enter your choice: 2
Enter password length: 5
Password: xP;]9

..Random Data Generation..
1. Generate Random Number
2. Random Password
3. Random Sample from List
4. Generate OTP
5.Exit
Enter your choice: 3
Enter comma-separated values: 11,12,13
Sample: ['13', '11', '12']

..Random Data Generation..
1. Generate Random Number
2. Random Password
3. Random Sample from List
4. Generate OTP
5.Exit
Enter your choice: 4
OTP: 637440

..Random Data Generation..
1. Generate Random Number
2. Random Password
3. Random Sample from List
```

```
3. Random Sample from List
4. Generate OTP
5.Exit
Enter your choice: 5

... Multi-Utility Toolkit ...
1. Datetime and Time Operations
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3. Random Data Generation
4. Generate Unique Identifiers (UUID)
5. File Operations (Custom Module)
6. Explore Module Attributes (dir())
7. Exit
Enter your choice: 4

...UUID Generation...
1. Generate UUID4
2. Generate Multiple UUIDs
3.Exit
Enter your choice: 1
UUID4: 67c76db9-4c4b-429d-b45c-0b8e7b6a5634

...UUID Generation...
1. Generate UUID4
2. Generate Multiple UUIDs
3.Exit
Enter your choice: 2
How many UUIDs? 3
e1486534-c392-4cf5-900c-efb59ec2157d
bb9fa70f-0bc0-4c81-b4c0-7aa302a2d92b
68e295ad-4e2e-44f1-ac0c-fdcd00fffb41

...UUID Generation...
1. Generate UUID4
2. Generate Multiple UUIDs
3.Exit
Enter your choice: 3

... Multi-Utility Toolkit ...
```

```
1. Datetime and Time Operations
2. Mathematical Operations
3. Random Data Generation
4. Generate Unique Identifiers (UUID)
5. File Operations (Custom Module)
6. Explore Module Attributes (dir())
7. Exit
Enter your choice: 5

...File Operations...
1. Write to File
2. Read from File
3. Append to File
4.Exit
Enter your choice: 1
Enter filename (with extension): sample.txt
Enter content to write: Hellooo..I am Ritu..!!
Written successfully.

...File Operations...
1. Write to File
2. Read from File
3. Append to File
4.Exit
Enter your choice: 2
Enter filename (with extension): sample.txt
File Content:
 Hellooo..I am Ritu..!!

...File Operations...
1. Write to File
2. Read from File
3. Append to File
4.Exit
Enter your choice: 3
Enter filename (with extension): sample.txt
Enter content to append: How are you?
Appended successfully.
```

```
Enter content to append: How are you?
Appended successfully.

...File Operations...
1. Write to File
2. Read from File
3. Append to File
4.Exit
Enter your choice: 4
Enter filename (with extension): s

... Multi-Utility Toolkit ...
1. Datetime and Time Operations
2. Mathematical Operations
3. Random Data Generation
4. Generate Unique Identifiers (UUID)
5. File Operations (Custom Module)
6. Explore Module Attributes (dir())
7. Exit
Enter your choice: 6
Enter module name(like math,datetime):math
['__doc__', '__loader__', '__name__', '__package__', '__spec__', 'acos', 'acosh', 'asin', 'asinh', 'atan', 'atan2', 'atanh', 'cbrt', '
ceil', 'comb', 'copysign', 'cos', 'cosh', 'degrees', 'dist', 'e', 'erf', 'erfc', 'exp', 'exp2', 'expm1', 'fabs', 'factorial', 'floor',
 'fmod', 'frexp', 'fsum', 'gamma', 'gcd', 'hypot', 'inf', 'isclose', 'isfinite', 'isinf', 'isnan', 'isqrt', 'lcm', 'ldexp', 'lgamma',
'log', 'log10', 'log1p', 'log2', 'modf', 'nan', 'nextafter', 'perm', 'pi', 'pow', 'prod', 'radians', 'remainder', 'sin', 'sinh', 'sqrt
', 'sumprod', 'tan', 'tanh', 'tau', 'trunc', 'ulp']

... Multi-Utility Toolkit ...
1. Datetime and Time Operations
2. Mathematical Operations
3. Random Data Generation
4. Generate Unique Identifiers (UUID)
5. File Operations (Custom Module)
6. Explore Module Attributes (dir())
7. Exit
Enter your choice: 7
Exit..Thank you
PS C:\Users\Ritu\Desktop>
```