```
Python 3.13.2 (tags/v3.13.2:4f8bb39, Feb  4 2025, 15:23:48) [MSC v.1942 64 bit
(AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.

= RESTART: C:/Users/sidra/AppData/Local/Programs/Python/Python313/calculator s.py
*****Simple Calculator*****

MENU
1. Addition
2. Subtraction
3. Multiplication
4. Division
5. Exit
Enter your choice: 1
Enter two numbers:
First number: 68
Second number: 67
Result =  135.0

MENU
1. Addition
2. Subtraction
3. Multiplication
4. Division
5. Exit
Enter your choice: 3
Enter two numbers:
First number: 6
Second number: 6
Result =  36.0

MENU
1. Addition
2. Subtraction
3. Multiplication
4. Division
5. Exit
Enter your choice: 5
Exiting the calculator. Goodbye!
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=== RESTART: C:/Users/sidra/AppData/Local/Programs/Python/Python313/list s.py ==
*****Menu-Driven List Operations*****

MENU
1. Create and Display Lists
2. Find Length of a List
3. Check if an Element is in the List
```

```
4. Concatenate Two Lists
5. Replace an Element in a List
6. Delete an Element from a List
7. Work with Nested Lists
8. Exit
Enter your choice: 1

i. Create and Display Lists
list1: ['python', 'list', '1974', '2005', '1983']
list2: ['Sidra', 'Solkar', 'Batminton', 'player', '2025', 'February']
list1[1:4]: ['list', '1974', '2005']
list1[1:]: ['list', '1974', '2005', '1983']
list1[0]: python
list1 * 2: ['python', 'list', '1974', '2005', '1983', 'python', 'list', '1974',
'2005', '1983']
list1 + list2: ['python', 'list', '1974', '2005', '1983', 'Sidra', 'Solkar',
'Batminton', 'player', '2025', 'February']

MENU
1. Create and Display Lists
2. Find Length of a List
3. Check if an Element is in the List
4. Concatenate Two Lists
5. Replace an Element in a List
6. Delete an Element from a List
7. Work with Nested Lists
8. Exit
Enter your choice: 5

v. Replace an Element in a List
Original list1: ['python', 'list', '1974', '2005', '1983']
Enter the index to replace: 0
Enter the new value: Java
Updated list1: ['Java', 'list', '1974', '2005', '1983']

MENU
1. Create and Display Lists
2. Find Length of a List
3. Check if an Element is in the List
4. Concatenate Two Lists
5. Replace an Element in a List
6. Delete an Element from a List
7. Work with Nested Lists
8. Exit
Enter your choice: 8
Exiting the program. Goodbye!
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SEComps(A)
```

```
========== RESTART:
C:/Users/sidra/AppData/Local/Programs/Python/Python313/tuple s.py
==========
*****Tuple Operations*****

Menu:
1. Create tuple
2. Display tuple
3. Find length of tuple
4. Check if element is present in tuple
5. Concatenate tuples
6. Delete tuple
7. Count occurrences of an element in tuple
8. Exit

Enter your choice (1-8): 2

Displaying the tuple:
('Sara', 'Sidra', 'Shifa', 'Joya')

Individual elements:
Sara
Sidra
Shifa
Joya

Menu:
1. Create tuple
2. Display tuple
3. Find length of tuple
4. Check if element is present in tuple
5. Concatenate tuples
6. Delete tuple
7. Count occurrences of an element in tuple
8. Exit

Enter your choice (1-8): 3

Length of the tuple: 4

Menu:
1. Create tuple
2. Display tuple
3. Find length of tuple
4. Check if element is present in tuple
5. Concatenate tuples
6. Delete tuple
7. Count occurrences of an element in tuple
8. Exit
```

```
Enter your choice (1-8): 8

Exiting the program.
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========== RESTART:
C:/Users/sidra/AppData/Local/Programs/Python/Python313/set s.py
==========
*****Set Operations*****

********** Set Operations Menu **********
1. Create Sets
2. Union, Intersection, Difference, Symmetric Difference
3. Modify Set
4. Remove Elements from Set
5. Use Pop and Clear
6. Check if an Item Exists in a Set
7. Exit
Enter your choice (1-7): 1
Set A: {0, 2, 4, 6, 8}
Set B: {2, 4, 11, 13, 15}

********** Set Operations Menu **********
1. Create Sets
2. Union, Intersection, Difference, Symmetric Difference
3. Modify Set
4. Remove Elements from Set
5. Use Pop and Clear
6. Check if an Item Exists in a Set
7. Exit
Enter your choice (1-7): 4
Initial Set: {1, 3, 4, 5, 6}
After Discarding 4: {1, 3, 5, 6}
After Removing 6: {1, 3, 5}
After Discarding 2: {1, 3, 5}

********** Set Operations Menu **********
1. Create Sets
2. Union, Intersection, Difference, Symmetric Difference
3. Modify Set
4. Remove Elements from Set
5. Use Pop and Clear
6. Check if an Item Exists in a Set
7. Exit
Enter your choice (1-7): 7
Exiting Program. Goodbye!
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```

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========================================== RESTART:
C:/Users/sidra/AppData/Local/Programs/Python/Python313/dictionary.py
==========================================
*****Dictionary Operations*****

********** Dictionary Operations Menu **********
1. Create Dictionary
2. Access Elements from Dictionary
3. Change or Add Elements in Dictionary
4. Delete or Remove Elements from Dictionary
5. Find Length and Perform Sorting
6. Exit
**********************************************
Enter your choice (1-6): 1
Empty Dictionary: {}
Dictionary with Integer Keys: {1: 'aeroplane', 2: 'Boeing'}
Dictionary with Mixed Keys: {'name': 'Sidra', 1: [2, 4, 3]}
Using dict(): {1: 'aeroplane', 2: 'Boeing'}
From Sequence as Pairs: {1: 'aeroplane', 2: 'Boeing'}

********** Dictionary Operations Menu **********
1. Create Dictionary
2. Access Elements from Dictionary
3. Change or Add Elements in Dictionary
4. Delete or Remove Elements from Dictionary
5. Find Length and Perform Sorting
6. Exit
**********************************************
Enter your choice (1-6): 5
Length of Dictionary: 5
Sorted Keys: [1, 3, 5, 7, 9]

********** Dictionary Operations Menu **********
1. Create Dictionary
2. Access Elements from Dictionary
3. Change or Add Elements in Dictionary
4. Delete or Remove Elements from Dictionary
5. Find Length and Perform Sorting
6. Exit
**********************************************
Enter your choice (1-6): 6
Exiting Program. Goodbye!
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========================================== RESTART:
C:/Users/sidra/AppData/Local/Programs/Python/Python313/factorial.py
```

```
========================================
*****Fatorial Of a Number*****
Enter a non-negative integer: 9
The factorial of 9 is 362880

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========================================= RESTART:
C:/Users/sidra/AppData/Local/Programs/Python/Python313/pattern.py
=========================================
*****Pattern*****
#
# #
# # #
# # # #

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========================================= RESTART:
C:/Users/sidra/AppData/Local/Programs/Python/Python313/Recursive.py
=========================================
*****Recursive Function*****
Enter a number:4
The sum is 10

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========================================= RESTART:
C:/Users/sidra/AppData/Local/Programs/Python/Python313/attendance.py
=========================================
*****Attendance*****
Enter the roll number of the student: 43
The student with roll number 43 is Present.

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========================================= RESTART:
C:/Users/sidra/AppData/Local/Programs/Python/Python313/largest num.py
=========================================
*****Largest Number*****
Enter the first number: 29
Enter the second number: 45
```

```
Enter the third number: 20
The largest number between 29,45 and 20 is 45.

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========== RESTART:
C:/Users/sidra/AppData/Local/Programs/Python/Python313/bubble.py
==========
Enter numbers separated by spaces: 2 4 6
Sorted array is: [2, 4, 6]

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========== RESTART:
C:/Users/sidra/AppData/Local/Programs/Python/Python313/bubble.py
==========
Enter numbers separated by spaces: 8 5 9
Sorted array is: [5, 8, 9]

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========== RESTART:
C:/Users/sidra/AppData/Local/Programs/Python/Python313/inheritance.py
==========
*****TEACHER*****
Enter Teacher's Name: Ashfaque
Enter Teacher's Age: 40
Enter Teacher's Years Of Experience: 10
Enter Teacher's Research Area: Java
*****STUDENT*****
Enter Student's Name: Sidra
Enter Student's Age: 19
Enter Student's Course: Java
Enter Student's Marks: 78
*****TEACHER*****
Name : Ashfaque
Age : 40
Experience : 10
Research Area : Java
*****STUDENT*****
Name : Sidra
Age : 19
Course : Java
Marks : 78.0
```

```
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>>>
========== RESTART:
C:/Users/sidra/AppData/Local/Programs/Python/Python313/multiple inheritance.py
==========
*****Multiple Inheritence*****
Employee ID: 8765
Employee Name: Shifa
Student ID: 231P087
Student Name: Sidra Solkar
Student College: RCOE
Internship period: 6 months

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>>>
========== RESTART:
C:/Users/sidra/AppData/Local/Programs/Python/Python313/multilevel inheritance.py
==========
*****Multilevel Inheritence*****
Enter the radius of the sphere: 5
Area of the circle: 78.50
Volume of the sphere: 523.33

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>>>
========== RESTART:
C:/Users/sidra/AppData/Local/Programs/Python/Python313/multilevel method
overriding.py ==========
*****Method overriding*****
In Volume class: Calculating volume of the sphere.
In Area class: Calculating area of the circle.
Enter the radius of the sphere: 3
Area of the circle: 28.27
Volume of the sphere: 113.10

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```