aryansharma@Aryans-MacBook-Air Python % python3 1.py Enter the first integer: 22 Enter the second integer: 30 Enter the first float number: 17.08 Enter the second float number: 29.30 Integer Addition: 22 + 30 = 52Integer Subtraction: 22 - 30 = -8Integer Multiplication: 22 \* 30 = 660Integer Modulo: 22 % 30 = 22Float Addition: 17.08 + 29.3 = 46.379999999999999 Float Subtraction: 17.08 - 29.3 = -12.220000000000002Float Multiplication: 17.08 \* 29.3 = 500.4439999999999 Float Division: 17.08 / 29.3 = 0.5829351535836177 aryansharma@Aryans-MacBook-Air Python % python3 2.py Enter a number: 7 7 is an Armstrong number. aryansharma@Aryans-MacBook-Air Python % python3 2.py Enter a number: 120 120 is not an Armstrong number. aryansharma@Aryans-MacBook-Air Python % python3 3.py Enter the starting number: 7 Enter the ending number: 97 Sum of prime numbers between 7 and 97 is: 1050 aryansharma@Aryans-MacBook-Air Python % python3 4.py Enter the first string: kepler 452b Enter the second string: and kepler 22b Original strings: String1 = kepler 452b, String2 = and kepler 22b Swapped strings: String1 = and kepler 22b, String2 = kepler 452b aryansharma@Aryans-MacBook-Air Python % python3 5.py The smallest number in the list is: 1 The greatest number in the list is: 20 aryansharma@Aryans-MacBook-Air Python % python3 6.py Enter a string: radar 'radar' is a palindrome. aryansharma@Aryans-MacBook-Air Python % python3 6.py Enter a string: hubble 'hubble' is not a palindrome.

#### o aryansharma@Aryans-MacBook-Air Python % python3 7.py String Function Menu: 1. String Length 2. Uppercase 3. Lowercase 4. Swap Case 5. Reverse 6. Exit Enter your choice (1/2/3/4/5/6): 1 Enter a string: kepler 452 b is a super earth exoplanet Length of the string: 39 String Function Menu: 1. String Length 2. Uppercase 3. Lowercase 4. Swap Case 5. Reverse

6. Exit

Enter your choice (1/2/3/4/5/6): 2

Enter a string: james webb

Uppercase: JAMES WEBB

## String Function Menu:

- 1. String Length
- 2. Uppercase
- 3. Lowercase
- 4. Swap Case
- 5. Reverse
- 6. Exit

Enter your choice (1/2/3/4/5/6): 3

Enter a string: VOYaGeR 1

Lowercase: voyager 1

## String Function Menu:

- 1. String Length
- 2. Uppercase
- 3. Lowercase
- 4. Swap Case
- 5. Reverse
- 6. Exit

Enter your choice (1/2/3/4/5/6): 4

Enter a string: gaganyaan

Swap Case: GAGANYAAN

# String Function Menu:

- 1. String Length
- 2. Uppercase
- 3. Lowercase
- 4. Swap Case
- 5. Reverse
- 6. Exit

Enter your choice (1/2/3/4/5/6): 5

Enter a string: ganymede

Reversed String: edemynag

#### String Function Menu:

- 1. String Length
- 2. Uppercase
- 3. Lowercase
- 4. Swap Case
- 5. Reverse
- 6. Exit

Enter your choice (1/2/3/4/5/6): 6 Exiting the program.

- aryansharma@Aryans-MacBook-Air Python % python3 8.py
   Enter an email address: andromeda2230@gmail.com
   The email address 'andromeda2230@gmail.com' belongs to the domain @gmail.com.
- aryansharma@Aryans-MacBook-Air Python % python3 8.py
   Enter an email address: mw007@icloud.com
   The email address 'mw007@icloud.com' does not belong to the domain @gmail.com.

```
aryansharma@Aryans-MacBook-Air Python % python3 9.py
Enter the number of elements in the list: 7
Enter element 1: 19
Enter element 2: 27
Enter element 3: 30
Enter element 4: 457
Enter element 5: 87
Enter element 6: 90
Enter element 7: 2048
The sum of numbers with 7 at the unit's place is: 571
```

```
aryansharma@Aryans-MacBook-Air Python % python3 10.py
 List Operations Menu:
 1. Insert Element
 2. Delete Element
 3. Quit
 Enter your choice (1/2/3): 1
 Enter the element to insert: 30
 Enter the position to insert the element: 1
 Updated List: ['30']
 List Operations Menu:
 1. Insert Element
 2. Delete Element
 3. Quit
 Enter your choice (1/2/3): 1
 Enter the element to insert: 22
 Enter the position to insert the element: 2
 Updated List: ['30', '22']
 List Operations Menu:
 1. Insert Element
 2. Delete Element
 3. Ouit
 Enter your choice (1/2/3): 2
 Delete Options:
 1. By Value
 2. By Position
 Choose delete option (1/2): 1
 Enter the element to delete: 22
 '22' has been deleted from the list.
 Updated List: ['30']
 List Operations Menu:
 1. Insert Element
 2. Delete Element
 3. Quit
 Enter your choice (1/2/3): 3
 Exiting the program.
```