1. Create a list of 5 integers and print them.

```
numbers = [10, 20, 30, 40, 50]

print(numbers)
```

2. Create a list of strings and print each element using a for loop.

```
fruits = ["apple", "banana", "cherry", "mango"]

for i in fruits:

    print(i)
```

3. Find the length of a given list using len().

```
items = [1, 2, 3, 4, 5]

print(len(items))
```

4. Access the 2nd and 4th elements from a list.

```
data = [10, 20, 30, 40, 50]

print("2nd element:", data[1])

print("4th element:", data[3])
```

5. Create a list of numbers and print a sublist from index 1 to 3.

```
nums = [5, 10, 15, 20, 25]

print(nums[1:4])
```

6. Add a new element at the end of a list using append().

```
colors = ["red", "blue"]

colors.append("green")

print(colors)
```

7. Insert an element at the 2nd position using insert().

```
names = ["John", "Alice", "Bob"]

names.insert(1, "David")

print(names)
```

8. Add multiple elements to a list using extend().

```
a = [1, 2, 3]

a.extend([4, 5])

print(a)
```

9. Remove a specific element from a list using remove().

```
letters = ['a', 'b', 'c', 'd']

letters.remove('c')

print(letters)
```

10. Remove the last element of a list using pop().

```
items = [100, 200, 300]

items.pop()

print(items)
```

11. Sort a list of numbers in ascending order using sort().

```
nums = [4, 1, 3, 5, 2]

nums.sort()

print(nums)
```

12. Reverse a list using reverse().

```
nums = [1, 2, 3, 4]

nums.reverse()

print(nums)
```

13. Count how many times a specific element appears in a list using count().

```
nums = [1, 2, 2, 3, 2, 4]

print(nums.count(2))
```

14. Find the index of an element using index().

```
nums = [5, 10, 15, 20]

print(nums.index(15))
```

15. Copy a list into another list using copy().

```
original = [1, 2, 3]

copy_list = original.copy()

print(copy_list)
```

16. Clear all elements from a list using clear().

```
data = [1, 2, 3]

data.clear()

print(data)
```

17. Use list comprehension to create a list of squares from 1 to 10.

```
squares = [x**2 for x in range(1, 11)]

print(squares)
```

18. Create a nested list (list inside a list) and access an element from the inner list.

```
nested = [[1, 2], [3, 4], [5, 6]]

print(nested[1][0])
```

19. Check if a particular element exists in a list using the 'in' operator.

```
names = ["Alice", "Bob", "Charlie"]

print("Bob" in names)
```

20. Write a program to take 5 numbers from the user, store them in a list, and print the sum of all numbers.

```
numbers = []

for i in range(5):

    n = int(input(f"Enter number {i+1}: "))

    numbers.append(n)

print("Sum of numbers:", sum(numbers))
```