1. Python program to find smallest number in a list
2. Python program to find largest number in a list
3. Python program to find second largest number in a list
4. Python program to find N largest elements from a list
5. Python program to print even numbers in a list
6. Python program to print odd numbers in a List
7. Python program to print all even numbers in a range
8. Python program to print all odd numbers in a range
9. Python program to print positive numbers in a list
10. Python program to print negative numbers in a list
11. Python program to print all positive numbers in a range

Solution

Here are the Python programs for the tasks you listed:

### 1. Python program to find the smallest number in a list:

```python

def find\_smallest(numbers):

return min(numbers)

# Example usage:

numbers = [10, 24, 3, 56, 78]

print("Smallest number is:", find\_smallest(numbers))

```

### 2. Python program to find the largest number in a list:

```python

def find\_largest(numbers):

return max(numbers)

# Example usage:

numbers = [10, 24, 3, 56, 78]

print("Largest number is:", find\_largest(numbers))

```

### 3. Python program to find the second largest number in a list:

```python

def find\_second\_largest(numbers):

sorted\_numbers = sorted(numbers, reverse=True)

return sorted\_numbers[1]

# Example usage:

numbers = [10, 24, 3, 56, 78]

print("Second largest number is:", find\_second\_largest(numbers))

```

### 4. Python program to find N largest elements from a list:

```python

def find\_n\_largest(numbers, N):

sorted\_numbers = sorted(numbers, reverse=True)

return sorted\_numbers[:N]

# Example usage:

numbers = [10, 24, 3, 56, 78]

N = 3

print(f"{N} largest elements are:", find\_n\_largest(numbers, N))

```

### 5. Python program to print even numbers in a list:

```python

def print\_even(numbers):

even\_numbers = [num for num in numbers if num % 2 == 0]

return even\_numbers

# Example usage:

numbers = [10, 24, 3, 56, 78]

print("Even numbers are:", print\_even(numbers))

```

### 6. Python program to print odd numbers in a list:

```python

def print\_odd(numbers):

odd\_numbers = [num for num in numbers if num % 2 != 0]

return odd\_numbers

# Example usage:

numbers = [10, 24, 3, 56, 78]

print("Odd numbers are:", print\_odd(numbers))

```

### 7. Python program to print all even numbers in a range:

```python

def print\_even\_in\_range(start, end):

even\_numbers = [num for num in range(start, end + 1) if num % 2 == 0]

return even\_numbers

# Example usage:

start, end = 1, 20

print("Even numbers in range are:", print\_even\_in\_range(start, end))

```

### 8. Python program to print all odd numbers in a range:

```python

def print\_odd\_in\_range(start, end):

odd\_numbers = [num for num in range(start, end + 1) if num % 2 != 0]

return odd\_numbers

# Example usage:

start, end = 1, 20

print("Odd numbers in range are:", print\_odd\_in\_range(start, end))

```

### 9. Python program to print positive numbers in a list:

```python

def print\_positive(numbers):

positive\_numbers = [num for num in numbers if num > 0]

return positive\_numbers

# Example usage:

numbers = [-10, 24, -3, 56, -78]

print("Positive numbers are:", print\_positive(numbers))

```

### 10. Python program to print negative numbers in a list:

```python

def print\_negative(numbers):

negative\_numbers = [num for num in numbers if num < 0]

return negative\_numbers

# Example usage:

numbers = [-10, 24, -3, 56, -78]

print("Negative numbers are:", print\_negative(numbers))

```

### 11. Python program to print all positive numbers in a range:

```python

def print\_positive\_in\_range(start, end):

positive\_numbers = [num for num in range(start, end + 1) if num > 0]

return positive\_numbers

# Example usage:

start, end = -10, 20

print("Positive numbers in range are:", print\_positive\_in\_range(start, end))

```

These programs handle common tasks involving lists and ranges in Python.