1. **Check if the first and last number of a list is the same**

Write a function to return True if the first and last number of a given list is same. If numbers are different then return False.

**Given**:

numbers\_x = [10, 20, 30, 40, 10]

numbers\_y = [75, 65, 35, 75, 30]

Code:

def first\_last\_same(a):

if len(a) >= 1:

if a[0] == a[-1]:

return True

else:

return False

else:

return False

print(first\_last\_same(numbers\_x))

print(first\_last\_same(numbers\_x))

**Expected Output**:

Given list: [10, 20, 30, 40, 10]

result is True

numbers\_y = [75, 65, 35, 75, 30]

result is False

### Display numbers divisible by 5 from a list

Iterate the given list of numbers and print only those numbers which are divisible by 5

**Expected Output**:

Given list is [10, 20, 33, 46, 55]

Divisible by 5

10

20

55

Code:

for n in list1:

if n % 5 == 0:

print(n,end=” “)

### Return the count of a given substring from a string

Write a program to find how many times substring “**Emma**” appears in the given string.

**Given**:

str\_x = "Emma is good developer. Emma is a writer"

**Expected Output**:

Emma appeared 2 times

Code:

Str\_y = “Emma”

count\_occ = lambda str\_x, str\_y: str\_x.count(str\_y)

count = count\_occ(str\_x, str\_y)

print(f'"{str\_y}" appeared {count} times')

### Check Palindrome Number

Write a program to check if the given number is a palindrome number.

A palindrome number is a number that is same after reverse. For example 545, is the palindrome numbers

**Expected Output**:

original number 121

Yes. given number is palindrome number

original number 125

No. given number is not palindrome number

Code:

def is\_palindrome\_number(num):

num\_str = str(num)

reversed\_str = num\_str[::-1]

if num\_str == reversed\_str:

return True

return False

# Example usage:

num1 = 121

num2 = 125

if is\_palindrome\_number(num1):

print(f" Yes, given number {num1} is palindrome number")

else:

print(f" No, given number {num1} is palindrome number")

### Write a Program to extract each digit from an integer in the reverse order.

For example, If the given int is **7536**, the output shall be “**6 3 5 7**“, with a space separating the digits.

Code:

def extract\_reverse(num):

num\_str = str(num)[::-1]

print(" ".join(num\_str))

num = 7536

extract\_reverse(num)