```
""" Python Program
Operators
@author: Varpe K. M.
"""
"""
Python Membership and Identity Operators | in, not in, is, is not

Membership operators:
        are operators used to validate the membership of a value.
        It test for membership in a sequence,
        such as strings, lists, or tuples.
"""
"""
in operator :
    The ‘in’ operator is used to check
    if a value exists in a sequence or not.
    Evaluates to true if it finds a variable in
    the specified sequence and false otherwise.
"""

# Python program to illustrate
# Finding common member in list
# using 'in' operator
list1=[1,2,3,4,5]
list2=[6,7,8,9]
for item in list1:
    if item in list2:
        print("overlapping")
    print("at item ", item)
else:
    print("not overlapping")
"""
Same example without using in operator:
Study after FUNCTIONS

# Python program to illustrate
# Finding common member in list
# without  using 'in' operator

#  Define a function() that takes two lists
def overlapping(list1,list2):

    c=0
    d=0
    for i in list1:
        c+=1
    for i in list2:
        d+=1
    for i in range(0,c):
        for j in range(0,d):
            if(list1[i]==list2[j]):
                return 1
     return 0
list1=[1,2,3,4,5]
list2=[6,7,8,9]
if(overlapping(list1,list2)):
    print("overlapping")
else:
    print("not overlapping")
"""
"""
```

```
‘not in’ operator-
        Evaluates to true if it does not finds a variable
        in the specified sequence and false otherwise.
"""
# Python program to illustrate
# not 'in' operator
x = 24
y = 20
list = [10, 20, 30, 40, 50 ];

if ( x not in list ):
   print("x is NOT present in given list")
else:
   print("x is  present in given list")

if ( y in list ):
   print("y is present in given list")
else:
   print("y is NOT present in given list")
"""
Identity operators

In Python are used to determine whether a value
is of a certain class or type.
They are usually used to determine the type of data
a certain variable contains.
There are different identity operators such as

‘is’ operator –
    Evaluates to true if the variables on either side
    of the operator point to the same object and false otherwise.
"""

# Python program to illustrate the use
# of 'is' identity operator
x = 5
if (type(x) is int):
    print ("true")
else:
    print ("false")
"""
‘is not’ operator –
    Evaluates to false if the variables on either side
    of the operator point to the same object and true otherwise.
"""
# Python program to illustrate the
# use of 'is not' identity operator
x = 5.2
if (type(x) is not int):
    print ("true")
else:
    print ("false")
```