Lab 5:

Task 1:
Here is the list: `[0, 3, 12, 8, 2]`. Write a script that display the product of all values from the list.

Task 2:
Write a script that will reverse the order of all elements in the list. Do not use `reversed()` function.

```
Input: [2, 6, 7, 1, 34, 64, 2, 7, 35, 1]
Output: [1, 35, 7, 2, 64, 34, 1, 7, 6, 2]
```

Task 3:
Write a script that will remove all the repetitions of its elements from a certain list. For example:

```
Input: [2, 6, 7, 1, 34, 64, 2, 7, 35, 1]
Output: [2, 6, 7, 1, 34, 64, 35]
```

Task 4:
Write a program that parses the contents of two lists and creates a third list from elements being in the first list and not being in the second one, and from elements being in the second list and not being in the first one.
Do it in two ways:

1. using any loop you want,
2. using `set()` function and `XOR` operator.

Values for both lists can be entered permanently in the program. We will learn later on how to enter them from the user.

```
list1 = [2, 58, 4, 12, 6, 8, 7, 9]
list2 = [12, 9, 25, 8, 64, 58]
```

Hint: you can convert a list to a set using `set()` function, and vice versa using `list()` function. Using sets you have possibility of using logical operators that are very fast.
Try:

```
list1 = [2, 58, 4, 12, 6, 8, 7, 9]
print(list1)
print(set(list1))
print(list(list1))
```

See the difference.

Task 5:
Write a program that checks that given two lists contain the same elements (their order in the lists is irrelevant). Prepare the values for both lists permanently in the program. List those items that are the same in both lists.
Prepare two solutions for this task:

1. general approach applicable in any language – using any loop you want,

2. Python approach – using sets (as in previous task) and an appropriate logical operator.

Input:

```
l1 = [1,3,6,78,35,24,55]
l2 = [12,24,35,24,88,120,155]
```

Output:

```
Common items: 35 24
Common items: [24, 35]
```