# Introduction[¶](#Introduction)

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This document addresses the task listed in I.T.5

The task as as described below:

## Problem[¶](#Problem)

Demonstrate the use of a list in a program. Include in your screenshot(s):

* A list in a program
* A function (that you’ve created) that uses the list
* The result of the function running

Submit a comment explaining your understanding of:

* The use of lists in programs
* The code you’ve submitted

Remember:

* Show all relevant and referenced code in your screenshots
* Use original work that is your own (i.e. no start/end code handed out as course materials (unless PDA specific), copied from the internet, or submitted by another student)
* Reattach all files on any resubmission
* Do NOT reuse examples from another submission

## Solution[¶](#Solution)

The following is python code which addresses the problem as described above:

In [ ]:

# The line below this creates a list called 'my\_list'. The elements of the list are not all of the same type, with the first being a string,

# the second an integer, the third and forth being Boolean values, and the last element being a float value.

my\_list = ["A", 52, True, False, 23.8]

# The contents of the list can be printed as follows:

print(my\_list)

['A', 52, True, False, 23.8]

In [ ]:

# The code below creates a simple function, called get\_length(). This function returns the length of the list.

def get\_length(lst):

return len(lst)

# The code below shows the result of applying the get\_length() function to the my\_list list object

get\_length(my\_list)

Out[ ]:

5

In [ ]:

# The function returns the length of the list object passed to it. As the print function is not called, no output is

# returned to the user.

# Instead, the function's output can be saved to a new object, and that object can be printed.

length\_of\_my\_list = get\_length(my\_list)

print(length\_of\_my\_list)

5

In [ ]:

# This confirms that the function has returned the value '5' which is the length of the list (i.e. the number of elements)

# it contains.

# The type of the return value is not explicitly declared, but implicitly cast as of type integer. This can be confirmed as

# follows:

print(type(length\_of\_my\_list))

<class 'int'>