

Assignment 1

1. Write a Python program to reverse a list of numbers given.

Ex: the given list is [10, 20, 5, 4, 33, 22] Your program should print [22, 33, 4, 5, 20, 10]

In [9]:

```
nums = [10, 20, 5, 33, 22]

def reverse_nums(nums):
    return nums[::-1]
```

In [10]:

```
rev_nums = reverse_nums(nums)
print(rev_nums)

[22, 33, 5, 20, 10]
```

1. Write a program to find out how many strings are there in the given list.

Ex: the given list is [10, 20, 'aaa', 'bbb', 33.5, 'ccc', 88, 'bbb', 25]

Your program output: There are 4 strings in the given list.

In [16]:

```
given_list = [10, 20, 'aaa', 'bbb', 33.5, 'ccc', 88, 'bbb', 25]

def str_count(given_list):
    count = 0
    for _ in given_list:
        if isinstance(_, str):
            count+=1
    return count
```

In [22]:

```
string_count = str_count(given_list)
print("Total number of strings Present in given list is", string_count)

Total number of strings Present in given list is 4
```

1. Write a program to count the number of zeros in a given number.

Ex: the given number is 10203

Your program output: There are 2 zeros in the given number.

In [25]:

```
n = 10203

def cnt_zero(n):
    count = 0
    for i in str(n):
        if i == '0':
            count += 1
    return count
```

In [28]:

```
number_zero = cnt_zero(n)
```

```
print(f"Total number of Zero in number {n} is {number_zero}")
```

Total number of Zero in number 10203 is 2

1. Write a program to know if a given string is palindrome or not. Note: Palindrome is a string that gives the same string when reversed.

Ex: the given string is 'malayalam'

Your program output: malayalam is palindrome.

In [40]:

```
def check_Palindrome(int_str):  
    input_str = int_str.replace(" ", "").lower    #to remove spaces and convert capital l  
etters into lower letters  
    out_str = input_str[::-1]  
    if input_str == out_str:  
        print(f"{out_str} is a palindrome.")  
    else:  
        print(f"{out_str} isn't a palindrome.")
```

```
int_str = str(input("Please enter a word or sentence to check whether it is a palindrome  
or not: "))
```

```
check_palindrome(int_str)
```

Please enter a word or sentence to check whether it is a palindrome or not: malayalam
malayalam is a palindrome.