Assignment - 4

Exercise-1

Students = ['Jay','Aslam','Suni','Hari']
print(f"The length of the list:{len(Students)}")
""The len() function is used to return the number of items (length)
in an object, such as a string, list, tuple,
dictionary, or other iterable objects.""

Output:

```
The length of the list:4

Process finished with exit code 0
```

Exercise-2

Name1 = input("Enter your name:")
print(f""Hello!,{Name1}"')

Output:

```
Enter your name:Jαy
"Hello!,Jay"

Process finished with exit code 0
```

Exercise-3

```
def find_maximum(numbers):
  if not numbers:
    return None
  max_value=numbers[0]
  for num in numbers:
    if num>max_value:
       max_value=num
  return max_value
```

```
numbers = [1,2,3,4,5,6,7,8,9]
max_num = find_maximum(numbers)
print(f"The max.number is :{max_num}")
```

Output:

```
The max.number is :9

Process finished with exit code 0
```

```
Exercise-4
```

```
x = 10 # Global variable
def my function():
  x = 5 #local variable
  print("Local x inside the function:", x)
my function()
print("Global x outside the function:", x)
"Here when we call the function (my function) it reads the x (x=5) inside the block,
not the global variable x."
```

Output:

```
Local x inside the function: 5
Global x outside the function: 10
Process finished with exit code 0
```

Exercise-5

```
def calculate_area(length, width=5):
  area = length * width
  return area
area1= calculate area(5,2)
print(f"Area with length:5 and width:2 : {area1}")
area2 = calculate_area(3)
print(f"Area with length:3 :{area2}")
```

Output:

```
Area with length:5 and width:2 : 10
Area with length: 3:15
Process finished with exit code 0
```