1. Find whether all elements in list are numbers or not

In [ ]:
```
n = eval(input("Enter the total number of elements: "))
lst = []
for i in range(n):
    x = input("Enter element [{}]:".format(i))
    lst.append(x)

print(lst)
```

```
['3', '5', 'hello', 'this', 'bye']
```

In [ ]:
```
def check_num_in_lst():
    for i in lst:
        if not i.lstrip("-").isdigit():
            return False
    return True

is_numerical_list = check_num_in_lst()
print("All elements in list are numbers" if is_numerical_list else "All e
```

```
All elements in list are not numbers
```

1. If numeric list then count number of odd values in it

In [ ]:
```
counter = 0
if is_numerical_list:
    for i in lst:
        if (int(i)%2 != 0):
            counter += 1
    print("There are {} odd values in the numerical list".format(counter)
```

1. if string list then display the largest string in the list

In [ ]:
```
if not is_numerical_list:
    largest_string = ""
    for i in lst:
        if len(i) > len(largest_string):
            largest_string = i
    print("The largest string in the list is {}".format(largest_string))
```

```
The largest string in the list is hello
```

1. if all elements are strings then count numeric string and string with alphabets only separately

In [ ]:
```
if not is_numerical_list:
    count_numeric = 0
    count_alpha = 0
    for i in lst:
        if i.isdigit():
            count_numeric += 1
        elif i.isalpha():
            count_alpha += 1
    print("{0} numeric string(s) and {1} alpha only string(s)".format(cou
```

```
2 numeric string(s) and 3 alpha only string(s)
```

1. Create a dictionary to keep track of count of distinct elements in the list e.g. {'element1': 2,element2':3...}

In [ ]:
```
my_dic = {}
for i in lst:
    my_dic[i] = lst.count(i)
print(my_dic)
```

```
{'3': 1, '5': 1, 'hello': 1, 'this': 1, 'bye': 1}
```