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 [ ]:
```python
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}
```

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```
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         lst = []
         for i in range(n):
             x = input("Enter element [{}]:".format(i))
             lst.append(x)

         print(lst)
```

```
['4', '3', '43', '23', '12']
```

```
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 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)
```

```
There are 3 odd values in the numerical list
```

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):
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```

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   separately

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   {'element1': 2,element2':3...}

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

{'4': 1, '3': 1, '43': 1, '23': 1, '12': 1}