

1. Write a Python program which accepts a sequence of comma-separated numbers from the user and generate a list and a tuple with those numbers.

```
i=input("enter the numbers separated by commas:").split(",")
print("list:",i)
print("tuple:",tuple(i))
```

2. Write a Python program to print all even numbers from a given numbers list in the same order and stop the printing if any numbers that come after 237 in the sequence.

```
numbers = [ 386, 462, 47, 418, 907, 344, 236, 375, 823, 566, 597, 978, 328, 615, 953, 345,
            399, 162, 758, 219, 918, 237, 412, 566, 826, 248, 866, 950, 626, 949, 687, 217,
            815, 67, 104, 58, 512, 24, 892, 894, 767, 553, 81, 379, 843, 831, 445, 742, 717,
            958,743, 527 ]
for i in numbers:
    if i==237:
        break;
    elif(i%2==0):
        print(i)
```

3. Write a python program for binary search to search a number in the list of given numbers. If the number isn't present, give the appropriate message. Both the list and the number to be searched is given by the user.

```
def binary_search(item_list,item):
    first = 0
    last = len(item_list)-1
    found = False
    while( first<=last and not found):
        mid = (first + last)//2
        if item_list[mid] == item :
            found = True
        else:
            if item < item_list[mid]:
                last = mid - 1
            else:
                first = mid + 1
    return found
```

```
n=int(input("enter the number of elements:"))
arr=[]
```

```
for i in range(0,n):
    ele=int(input())
    arr.append(ele)
```

```

n=int(input("enter the element to be searched:"))
if (binary_search(arr, n)):
    print("the element is present in the list")
else:
    print("the element is not present in the list")

```

4. Write a Python program to calculate the sum of the digits in an integer.

```

n=int(input("enter a number:"))
s=0
while(n>0):
    dig=n%10
    s=s+dig
    n=n//10
print("the sum of the digits is :",s)

```

5. Write a Python program to check if a string is numeric.

```

string=input("enter a string:")
count = 0
for a in string:
    if (a.isnumeric()) == True:
        count+=1
    break
if (count!=0):
    print("the string is numeric")
else:
    print("the string is not numeric")

```