#Q1: Write a Python program to map two lists into a dictionary.

```
L1 = [1,2,3,4]
L2 = ['a','b','c','d']
newDict = {}
for i in range(len(L1)):
   newDict[L1[i]] = L2[i]
print(newDict)
```

#Q2: Write a Python program that accepts a string and calculate the number of digits and letters

```
userString = input("Enter the string: ").replace(" ","").replace(",","").replace(".","")
baseList = list(userString)
charCount = 0
intCount = 0
for i in range(len(baseList)):
   flagChar = True
   for j in range(10):
      if baseList[i]==str(j):
         intCount+=1
         flagChar = False
         break
   if(flagChar == True):
      charCount +=1
print("Letters",charCount)
print("Digits",intCount)
```

#Q3: Write a Python function that takes a list of words and returns the length of the longest one.

```
numberOfValues = int(input("Enter number of words in list: "))
checkList = []
while (numberOfValues>0):
```

```
        listValue = input("Enter the word you want to add in list: ")
        checkList.append(listValue)
        numberOfValues -= 1
maxLengthString = max(checkList, key=len)
print("Longest word:", ' '.join(checkList))
print("Length of the longest word:",maxLengthString,len(maxLengthString))
```

#Q4: Write a Python program to construct the following pattern, using a nested loop number.

```
def printPattern(rows):
  for i in range(rows+1):
    for k in range(i):
      print(i,end='')
    print("")
numOfRows = int(input("Enter number of rows: "))
printPattern(numOfRows)
```

#Q5: Check whether a number is russian prime or not.

```
def isRussianPrime(rpnum):
  varLength = len(rpnum)
  newList = []
  while varLength>0:
    listItem = rpnum[:varLength]
    newList.append(int(listItem))
    varLength -= 1

  flagPrime = True
  for i in range(len(newList)):
    for j in range(2,newList[i]):
      if newList[i]%j== 0:
```

```
            flagPrime = False
            break
    if(flagPrime == True):
        print("{} is Russian Prime".format(rpnum))
    else:
        print("{} is not Russian Prime".format(rpnum))
newInput = input("Enter the number to check whether it's Russian Prime or Not: ")
isRussianPrime(newInput)
```