In [43]:
```
#read a single line containing space-separated integer
numbersStr=input("").split(' ')
sumPN=0
for number in numbersStr:
    number=int(number)
    is_prime=True
    if number > 1:
        for i in range(2, number):
            if (number % i) == 0:
                is_prime=False
                break
        if is_prime:
            #calculate the sum of all prime numbers from 1 to N.
            sumPN=sumPN+number


#Display the result
print('sum of primes',str(sumPN))
```

```
3 5 8 77 564 9
sum of primes 8
```

In [44]:
```
# Python3 code to demonstrate
# to check for strictly increasing list
# using reduce() + lambda

# initializing list
test_list = [1, 4, 5, 7, 8, -2]

# printing original lists
print ("Original list : " + str(test_list))

# using reduce() + lambda
# to check for strictly increasing list
res = bool(lambda test_list: reduce(lambda i, j: j if
                 i < j else 9999, test_list) != 9999)

# printing result
print ("Is list strictly increasing ? : " + str(res))
```

```
Original list : [1, 4, 5, 7, 8, -2]
Is list strictly increasing ? : True
```

In [45]:
```
def expanding(l):
    for i in range(0,len(l)-2):
        if (abs(l[i+2]-l[i+1])>abs(l[i+1]-l[i])):
            Answer=True
        else:
            Answer=False
            return Answer
    return Answer

expanding([1,3,7,2,-3,4])
```

Out[45]:
```
False
```

In [46]:
```
def permute(s, answer):
    if (len(s) == 0):
        print(answer, end = "  ")
        return

    for i in range(len(s)):
        ch = s[i]
        left_substr = s[0:i]
        right_substr = s[i + 1:]
        rest = left_substr + right_substr
        permute(rest, answer + ch)

#Driver Code
answer = ""

s = input("Enter the string : ")

print("All possible strings are : ")
permute(s, answer)
```

```
Enter the string : USA
All possible strings are :
USA  UAS  SUA  SAU  AUS  ASU
```