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F1

Lab V1 Solutions

Q1)#Write a program to print true if given string consists of unique chars and sorted in increasing order false otherwise

```
def checkUnique(userStr):
    charFreq={}

    for eachChar in userStr:
        if eachChar in charFreq.keys():
            charFreq[eachChar]+=1
        else:
            charFreq[eachChar]=1

    dupChar=[]
    for char in charFreq.keys():
        if charFreq[char]>=2:
            dupChar.append(char)
    if len(dupChar)!=0:
        return False

    return True

userStr=input("Enter string:")
uniqueRes=checkUnique(userStr)
if uniqueRes==False:
    print("False returned")
else:
    res = ".join(sorted(userStr))
    if userStr==res:
        print("All conditions true")
```

```
jupyter OSS Lab V1 Solutions Last Checkpoint: 23 minutes ago (unsaved changes)
File Edit View Insert Cell Kernel Widgets Help Trusted Python 3
In [3]: #Write a program to print true if given string consists of unique chars and sorted in increasing order false otherwise

def checkUnique(userStr):
    charFreq={}

    for eachChar in userStr:
        if eachChar in charFreq.keys():
            charFreq[eachChar]+=1
        else:
            charFreq[eachChar]=1

    dupChar=[]
    for char in charFreq.keys():
        if charFreq[char]>=2:
            dupChar.append(char)
    if len(dupChar)!=0:
        return False

    return True

userStr=input("Enter string:")
uniqueRes=checkUnique(userStr)
if uniqueRes==False:
    print("False returned")
else:
    res = ''.join(sorted(userStr))
    if userStr==res:
        print("All conditions true")

Enter string:aecffni
False returned
```

Q2)import numpy as np

```
list1=[]
```

```
list2=[]
```

```
size1=int(input("Enter size of 1st list"))
```

```
for i in range(size1):
```

```
    ele1=input("Enter element for list:")
```

```
    list1.append(ele1)
```

```
res1=np.array(list1)
```

```
size2=int(input("Enter size of 1st list"))
```

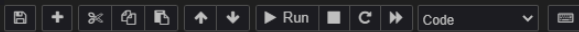
```
for i in range(size2):
```

```
    ele2=input("Enter element for list:")
```

```
    list2.append(ele2)
```

```
res2=np.array(list2)
```

```
print(np.in1d(res1,res2))
```



```
In [6]: import numpy as np
list1=[]
list2=[]
size1=int(input("Enter size of 1st list"))
for i in range(size1):
    ele1=input("Enter element for list:")
    list1.append(ele1)
res1=np.array(list1)

size2=int(input("Enter size of 1st list"))
for i in range(size2):
    ele2=input("Enter element for list:")
    list2.append(ele2)
res2=np.array(list2)

print(np.in1d(res1,res2))
```

```
Enter size of 1st list4
Enter element for list:Python
Enter element for list:Java
Enter element for list:C
Enter element for list:Cpp
Enter size of 1st list4
Enter element for list:Fortan
Enter element for list:C
Enter element for list:Cpp
Enter element for list:Java
[False True True True]
```