

Name(s) and NetId(s):

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Trace the output of the following programs. Make sure you are working on paper, **not** on a computer.

```
a = ":) Hello There CORE 109"
b = ""
for c in a:
    if c.isalpha():
        b+=c
print (b)
```

```
phrase = "4 score and 7 years ago ..."
for c in phrase:
    if not (c.isdigit()):
        print (c, end="")
    else:
        x = int(c)
        if x % 2 == 0:
            print (x+1, end="")
        else:
            print (x-1, end="")
```

```
a = ":) Hello There CORE 109"
b = ""
for c in a:
    if c.isalpha():
        b+=c
    if c.islower():
        b+=c.upper()
    if c.isupper():
        b+=c.lower()
print (b)
```

```
list = ['Joanna', 'Jason', 'James', 'Jada']
list2 = []
for name in list:
    list2 += [name.upper()]
print (list2)
```

```
word = "pikachu"
for i in range(0, len(word)):
    if i % 2 == 0 :
        print (i, word[i])
```

```
list = ['Joanna', 'Jason', 'James', 'Jada', ]
list2 = []
for name in list:
    list2 += [name[1:3]]
print (list2)
```

```
word = "hello, world"
newword = word[:2] + word[len(word)-2:]
print (newword)
```