

Open source programming FAT

19BCA0009

CHIDAMBARA THANU

Question:5

a) Write a program that rotates the elements of a list so that the element at the first index moves to the second index, the element in the second index moves to the third index, etc.... and the element in the last index moves to the first index.

Code:

```
l = list(input("Enter the list: "))
```

```
print("list:")
```

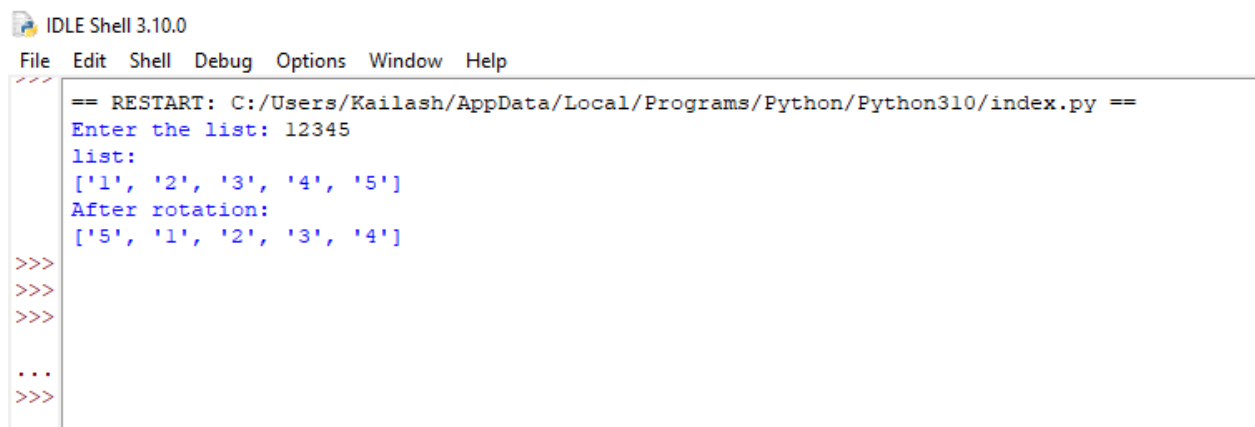
```
print(l)
```

```
l = l[-1:] + l[:-1]
```

```
print("After rotation:")
```

```
print(l)
```

Output:



```
IDLE Shell 3.10.0
File Edit Shell Debug Options Window Help
== RESTART: C:/Users/Kailash/AppData/Local/Programs/Python/Python310/index.py ==
Enter the list: 12345
list:
['1', '2', '3', '4', '5']
After rotation:
['5', '1', '2', '3', '4']
>>>
>>>
>>>
...
>>>
```

b) Write a program that asks the user to enter a string. The program should

create a new string called new_string from the user's string such that the second character is changed to an asterisk and three exclamation points are attached to the end of the string. Finally print new_string. Example QBbert changed to

Q*ert!!!

Code:

```
n = input("Enter a String: ")
```

```
pos = 1
```

```
pos2 = len(n)
```

```
first = '*'
```

```
second = "!!!"
```

```
n = n[:pos] + first + n[pos+1:]
```

```
print(n)
```

```
n = n[:pos2] + second
```

```
print(n)
```

Output:

```
>>> |===== RESTART: C:\Users\Railash\AppData\Local\Programs\Python\Python310\but.py =====>>> |
Enter a String: thanu
t*anu
t*anu!!!
>>> |
```

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c) Write a program that asks the user for an integer and creates a list that consists of the factor of that integer.

Code:

```
def print_factors(x):
```

```
for i in range(1, x + 1):  
    if x % i == 0:  
        factors=[i]  
        print("facors list:",factors)
```

```
num=int(input("enter a number:"))  
print_factors(num)
```

Output:

```
>>> ===== RESTART: C:/Users/Kailash/AppData/Local/Programs/Python/Python310/factor.py =====  
enter a number:100  
facors list: [1]  
facors list: [2]  
facors list: [4]  
facors list: [5]  
facors list: [10]  
facors list: [20]  
facors list: [25]  
facors list: [50]  
facors list: [100]  
>>>
```

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