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Course Code: AI-503

Course: Computer Programming with Python

1. Write a Python program to get a list, sorted in increasing order by the last element in each tuple from a given list of non-empty tuples. Sample List : [(2, 5), (1, 2), (4, 4), (2, 3), (2, 1)]

```
sample_list = [(2, 5), (1, 2), (4, 4), (2, 3), (2, 1)]
def get_last(t):
    return t[-1]

sorted_list = sorted(sample_list, key=get_last)
print(sorted_list)
```

```
[(2, 1), (1, 2), (2, 3), (4, 4), (2, 5)]
```

2. Write a Python program to get a string from a given string where all occurrences of its first char have been changed to '$', except the first char itself. Sample String: 'restart'

```
def change_char(s):
    first_char = s[0]
    return first_char + s[1:].replace(first_char, '$')

result = change_char('restart')
print(result)
```

```
resta$t
```

3. Write a Python program to find the first appearance of the substring 'not' and 'poor'; from a given string, if 'poor' follows the 'not', replace the whole 'not'...'poor' substring with 'good'. Return the resulting string. Sample String : 'The lyrics is not that poor!'

```
def not_poor(text):
    s_not = text.find('not')
    s_poor = text.find('poor')

    if s_not != -1 and s_poor > s_not:
```

```
            text = text[:s_not] + 'good' + text[s_poor+4:]
        return text

print(not_poor('The lyrics is not that poor!'))
```

```
The lyrics is good!
```

4. Write a python program to sort a dictionary by value.

```
d = {'Cricket': 3, 'Badminton': 2, 'Football': 4, 'Hockey': 1}
def get_value(item):
    return item[1]
sorted_dict = dict(sorted(d.items(), key=get_value))
print(sorted_dict)
```

```
{'Hockey': 1, 'Badminton': 2, 'Cricket': 3, 'Football': 4}
```

5. Write a python program to add key to a dictionary.

```
d = {'Cricket': 1, 'Badminton': 2, 'Football': 3, 'Hockey': 4}
d['Tennis']= 5
print(d)
```

```
{'Cricket': 1, 'Badminton': 2, 'Football': 3, 'Hockey': 4, 'Tennis': 5}
```